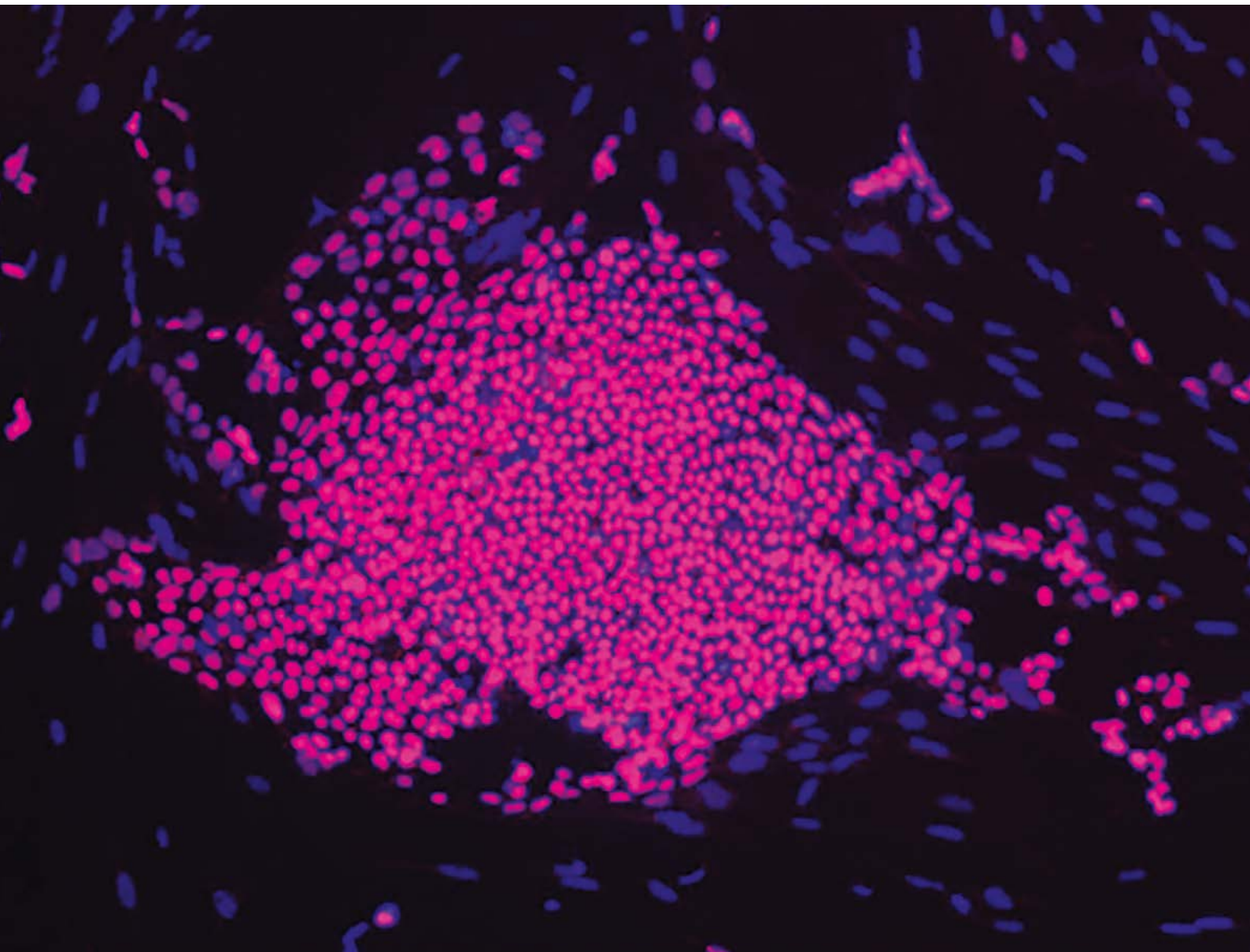


ANTIBODIES FOR STEM CELL RESEARCH

www.ptglab.com



Front Cover:

Confocal immunofluorescent analysis of human embryonic stem cells with OCT4 antibody (11263-1-AP) at a dilution of 1:100. The MERGE is the merge of PE and DAPI.

WELCOME

Foreword

Stem cell research is active in many of the disciplines making up life sciences and medicine; not unexpected given that the cell types at the heart of stem cell research include those that form us and control our development. Even after birth certain stem cell populations remain, replenishing our bodies with new generations of cells. The study of such cells, referred to as adult stem cells, helps us to understand the many processes involved in health, aging and disease. Within the latter subject alone, stem cells form the basis of intensive research and controversy surrounding the origins of cancers. The concept of the cancer stem cell has gained momentum as a theory, and continues to be explored.

The reach of stem cell research has been extended further still with the emergence of induced pluripotency technologies. From the origins of life and disease, induced pluripotent stem cells (iPSCs) have taken the field into the domain of treatments and therapeutics. Once considered as bound to the realms of science fiction, tissue regeneration is now a possibility – offering hope for currently untreatable conditions such as motor neuron disease and paralysis. Among other uses, iPSCs also offer methods of testing new drugs in humanized settings and for understanding the patient-specific basis of a disease.

Proteintech® is pleased to offer the stem cell research community hundreds of pre-validated antibodies for their investigations. If you can't find the antibody that you're looking for from the hundreds included in these pages, please visit www.ptglab.com to search its catalog of over 10,000 targets covered.

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THE BENCHMARK IN ANTIBODIES

Since the day it was founded, Proteintech[®] has been making all of its products to the highest standards possible whilst taking complete responsibility for the quality of each product.

- Proteintech[®] makes every single antibody in its 12,000+ catalog.
- Each Proteintech[®] product is unique and cannot be bought under a different label.
- Antibodies are tested with siRNA treated samples to demonstrate specificity.
- It works in every single species and application or get a full money-back refund.

Proteintech[®] has over 12,000 antibodies in its extensive catalog, all fully validated and available for next day delivery.



FOCUS ANTIBODIES

Focus On Lamin A/C

Focus Antibody
Lamin A/C

Catalog Number
10298-1-AP

Type
Rabbit Polyclonal

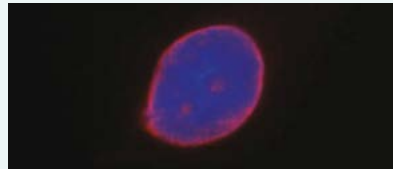
Applications
ELISA, FC, IF, IHC, IP, WB

10 Publications

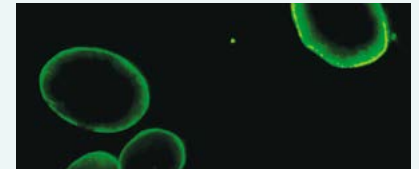
Lamin A/C is encoded by the LMNA gene which is significant in several diseases of the muscular and nervous systems such as Emery-Dreifuss muscular dystrophy (EDMD), limb girdle muscular dystrophy (LGMD) and Charcot-Marie-Tooth disease (CMT). These diseases are largely characterized by progressive muscle wasting and weakening, contractures of certain joints – such as the elbows and knees in EDMD and arch of the foot in CMT – and, in the case of EDMD and LGMD, heart problems. It also plays a role in other diseases such as familial partial lipodystrophy – a skin condition characterized by the loss of subcutaneous fat; dilated cardiomyopathy – a condition in which the heart becomes enlarged and weakened; and Hutchinson-Gilford progeria syndrome – the onset of aging-like processes in infancy. Considering the diversity of these diseases, it is intriguing how one protein might be linked to the etiology of them all: how does lamin A/C play a role in such varied and different diseases?

Lamin A/C's role in nuclear integrity provides the answer; it is an integral component of the nuclear lamina, a dense fibrillar network structure underlying the nuclear envelope playing an important role in the structural integrity of the nucleus and its traffic control. Lamin A/C also has a role in important cellular processes such as DNA replication and cell division. It is thought that aberrant expression of Lamin A/C causes the prior mentioned degenerative diseases by producing irregularities in nuclear shape and chromatin organization and generating perinuclear and intranuclear vacuoles. Such abnormalities are seen in the affected cells of individuals with these conditions.

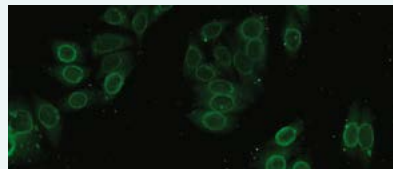
Proteintech®'s Lamin A/C antibody has previously featured in two papers separately concerning premature aging (PMID: 19264120) and hepatitis B infection (PMID: 20529248).



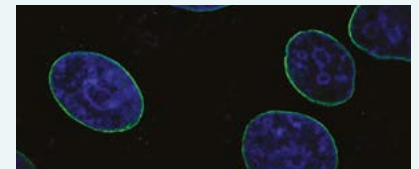
Immunofluorescent analysis of HepG2 cells, using LMNA antibody (10298-1-AP) at a 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Lamin A/C antibody (10298-1-AP) at a dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Immunofluorescent analysis of HepG2 cells, using Lamin A/C antibody (10298-1-AP) at a dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Lamin A/C antibody (10298-1-AP) at a dilution of 1:200 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

LIN28 Antibody In Stem Cell & Cancer Research

Focus Antibody
LIN28

Catalog Number
11724-1-AP

Type
Rabbit Polyclonal

Applications
ELISA, IF, IHC, IP, WB

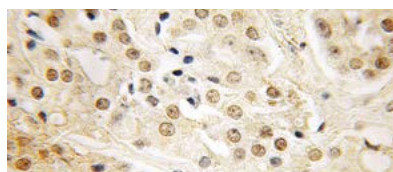
26 Publications

si Tested with siRNA

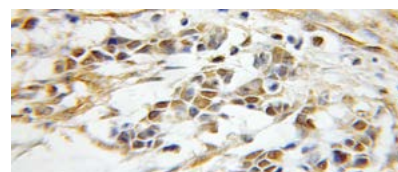
LIN28 is an RNA binding protein involved in the maintenance of embryonic stem cell (ESC) pluripotency. It is also one of several reprogramming factors that allow the derivation of induced pluripotent stem cells (iPSCs) from somatic sources, a technique that offers potential ways to bypass the need for embryonic stem cells (ESCs) in stem cell research.

Our LIN28 antibody has been used by Viswanathan and colleagues at Harvard Medical School, a group who have published several key papers regarding LIN28 in recent years. Last year in Nature Genetics they published their finding that LIN28 promotes transformation and is associated with advanced human malignancies. In a subsequent Nature paper they reported a role for LIN28 in primordial germ-cell development and in germ-cell malignancy. In both papers our LIN28 antibody was used for immunohistochemistry

In support of this work, a recent Human Pathology paper by Cao et al. (2011) studied 103 primary and 81 metastatic testicular germ cell tumors. Using formalin-fixed, paraffin embedded tissue from these samples, IHC was carried with our LIN28 antibody; to see how specific this staining was, the authors also looked at LIN28 staining in IHC samples from 327 non-germ cell tumors. They also compared LIN28 staining with SALL4 (Sal-like 4) and OCT4 (octamer-binding transcription factor 4) in all germ-cell tumors. Cao and colleagues found that in most of the germ cell tumors, strong LIN28 signal was seen, whereas only 10 of the 327 non-germ cell tumor samples showed weak LIN28 staining at best. The paper concluded that LIN28 is a highly sensitive marker for testicular germ-cell neoplasias with relatively high specificity. Whilst having a similar level of diagnostic utility as SALL4, LIN28 had a major advantage over OCT4 in diagnosing yolk sac tumors (a type of germ cell carcinoma).



Immunohistochemical of paraffin-embedded human prostate cancer using LIN28 antibody (11724-1-AP) at a dilution of 1:50 (40x objective).



Immunohistochemical of paraffin-embedded human colon cancer using OCT4 antibody (11263-1-AP) at a dilution of 1:50 (10x objective).

Related Antibodies

| Antibody Name | Catalog Number | Type | Applications |
|-----------------|----------------------|-------------|---|
| LIN28 | 3 60024-1-Ig | Mouse Mono | Antibody neutralization, ELISA, IHC, WB |
| LIN28A-Specific | 2 16177-1-AP | Rabbit Poly | ELISA, IHC, WB |
| OCT4 | 18 11263-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |

00 This number shows the amount of times our antibody has been cited in a publication.

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BRD7 Antibody In Stem Cell Gene Activation & Repression Study

Focus Antibody
BRD7

Catalog Number
51009-2-AP

Type
Rabbit Polyclonal

Applications
ChIP, CoIP, ELISA, IF, IHC, WB

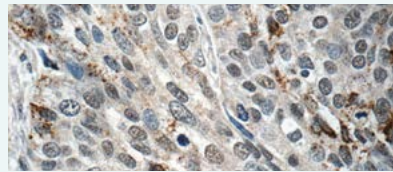
8 Publications

si Tested with siRNA

Our bromodomain containing protein 7 (BRD7) antibody was used by Kaeser and colleagues (Kaeser et al. Journal of Biological Chemistry, 2008) to identify PBAF (Polybromo-associated BRG1 associated factor)-specific BRD7 as a novel component of the SWI/SNF complex. The original research aims of the paper were to investigate the different compositional aspects of this complex in embryonic stem cells (ESCs); its diverse nature and the requirement for some but not all of its subunits, particularly in ESCs, was something that intrigued the authors. SWI/SNF has the potential to both repress or activate certain genes depending on its subunit composition; for example, Incorporation of distinct, mutually exclusive paralogues of the ARID (AT-rich interactive domain) 1 protein into

SWI/SNF complexes determines whether the complex functions as a corepressor (ARID1A) or coactivator (ARID1B) of cell cycle control genes.

Among the several main observations of the paper was the identification of BRD7 as a new PBAF-specific subunit. The authors found that BRD7 was present in purifications from pluripotent ESCs, differentiated ESCs and HeLa cells; implying its presence in a variety of cell types. Using an RNAi-based approach for BRD7 and ARID1A, the authors showed that both kinds of SWI/SNF complexes played important roles in gene-specific regulation and activation, adding new insights into how the composition of SWI/SNF complexes impose transcriptional regulation on individual target genes.



Immunohistochemistry of paraffin-embedded human cervical cancer tissue slide using BRD7 antibody (51009-2-AP) at a dilution of 1:50 (40x objective).

Related Antibodies

| Antibody Name | Catalog Number | Type | Applications |
|---------------|----------------|-------------|---------------|
| ARIDIA | 18825-1-AP | Rabbit Poly | ELISA, IF, WB |

MAGOH Regulates Neural Stem Cell Development & Is Linked To Microcephaly

Focus Antibody
MAGOH

Catalog Number
12347-1-AP

Type
Rabbit Polyclonal

Applications
ELISA, IHC, IP, WB

4 Publications

Our MAGOH antibody has helped shed light on neural development and the disease mechanism behind microcephaly. It was used for immunohistochemical analysis of *Mos2* (modifier of *Sox10*)^{+/-} mice in a Nature Neuroscience paper published last year. The authors, Silver et al., had previously identified the *Mos2*^{+/-} mutant mouse as a microcephaly model as it phenotypically displayed characteristics of the congenital disorder: small body size, hypopigmentation and a reduced brain size. In the work carried out for the Nature Neuroscience paper, Silver and colleagues had found this mutant carried a single base deletion in the *Magoh* gene. They also found that mice homozygous for the *Magoh* loss-of-function mutation died prenatally, whereas those heterozygous for the mutation showed aberrant cortical layering and a reduction in neurons when compared with wild-type mice. On closer inspection, the dividing cells in the *Magoh*

mutants had altered mitotic spindle orientations and abnormal chromosome number. The authors noted that this phenotype was similar to that of *Lis1* mutant mice; the *Lis1* gene encodes a microtubule-associated protein, critical for mitotic spindle integrity, and has been previously associated with microcephaly in humans.

Interestingly, Silver and coworkers found that *Lis1* was depleted in the *Magoh* mutant cortex and were able to rescue the *Magoh* microcephaly phenotype with *Lis1* expression. The *Magoh* gene, which is completely conserved between mice and humans, encodes for a component of the RNA-binding exon junction complex (EJC), which plays a crucial role in the post-translational regulation of mRNA. This data links the EJC with neural development and the development of microcephaly.



Immunohistochemical of paraffin-embedded human ovary tumor using MAGOH antibody (12347-1-AP) at a dilution of 1:50 (10x objective).

ANTIBODY PRODUCT LIST

| Antibody Name | Cat. No. | Type | Applications |
|--------------------|---------------|-------------|--------------------------------|
| ACPS | 11594-1-AP | Rabbit Poly | ELISA, IHC |
| Aggrecan | 4 13880-1-AP | Rabbit Poly | ELISA, IHC, WB |
| ALPL | 10 11187-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| Annexin VI | 12542-1-AP | Rabbit Poly | ELISA, IHC, WB |
| B4GALNT1 | 13396-1-AP | Rabbit Poly | ELISA, WB |
| BCAS3 | 10402-1-AP | Rabbit Poly | ELISA, WB |
| BCRP/ABCG2 | 2 10051-1-AP | Rabbit Poly | ELISA, IHC, WB |
| beta Tubulin | 22 10094-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| beta Tubulin | 14 10068-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| BMI1 | 4 10832-1-AP | Rabbit Poly | ChIP, CoIP, ELISA, WB, IHC, IF |
| BMI1 | 66161-1-Ig | Mouse Mono | ELISA, IF, IHC, IP, WB |
| BMPR1A | 2 12702-1-AP | Rabbit Poly | ELISA, IF, WB |
| BMPR2 | 14376-1-AP | Rabbit Poly | ELISA, IP, WB |
| BMPR2 | 19087-1-AP | Rabbit Poly | ELISA, WB |
| BVES | 12920-1-AP | Rabbit Poly | ELISA, IHC, WB |
| CA2 | 2 16961-1-AP | Rabbit Poly | ELISA, WB |
| Calponin | 3 13938-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Calponin | 24855-1-AP | Rabbit Poly | ELISA, IHC, WB |
| CAMSAP1L1 | 9 17880-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| Cardiac Troponin T | 4 15513-1-AP | Rabbit Poly | ELISA, IHC, WB |
| CD10,MME | 23782-1-AP | Rabbit Poly | ELISA, FC, IHC |
| CD13 | 14553-1-AP | Rabbit Poly | ELISA, IHC, WB |
| CD133 | 14 18470-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, WB |
| CD133 | 18495-1-AP | Rabbit Poly | ELISA, WB |
| CD133-1,2,3 | 19946-1-AP | Rabbit Poly | ELISA, WB |
| CD133-1,2,3,5,7 | 19945-1-AP | Rabbit Poly | ELISA, WB |

| Antibody Name | Cat. No. | Type | Applications |
|-------------------|---------------|-------------|----------------------------|
| CD146/MCAM | 3 17564-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| CD146/MCAM | 66153-1-Ig | Mouse Mono | ELISA, FC, IHC, WB |
| CD151 | 10418-1-AP | Rabbit Poly | ELISA, WB |
| CD31 | 13 11265-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| CD31 | 2 66065-1-Ig | Mouse Mono | ELISA, WB |
| CD34 | 4 14486-1-AP | Rabbit Poly | ELISA, IHC, WB |
| CD38 | 25284-1-AP | Rabbit Poly | ELISA, IHC, WB |
| CD44 | 19 15675-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| CD44 | 60224-1-Ig | Mouse Mono | ELISA, FC, IF, IHC, WB |
| CD59 | 10742-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, WB |
| CD93 | 18283-1-AP | Rabbit Poly | ELISA, IHC |
| CDCP1 | 12754-1-AP | Rabbit Poly | ELISA, WB |
| CEA | 10421-1-AP | Rabbit Poly | ELISA, IHC |
| CEACAM21 | 17209-1-AP | Rabbit Poly | ELISA, IF, WB |
| CHOP | 27 15204-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| CHOP; GADD153 | 60304-1-Ig | Mouse Mono | ELISA, WB |
| c-Kit/CD117 | 18696-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| c-Kit/CD117 | 65042-1-Ig | Mouse Mono | ELISA, IHC |
| Claudin 11 | 12152-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, WB |
| CLEC2D | 13188-1-AP | Rabbit Poly | ELISA, WB |
| c-Myc | 6 10057-1-AP | Rabbit Poly | ELISA, WB |
| c-MYC | 22 10828-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| CNN3 | 11509-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| Collagen Type I | 28 14695-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| Collagen Type II | 15943-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Collagen Type III | 16 13548-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, WB |

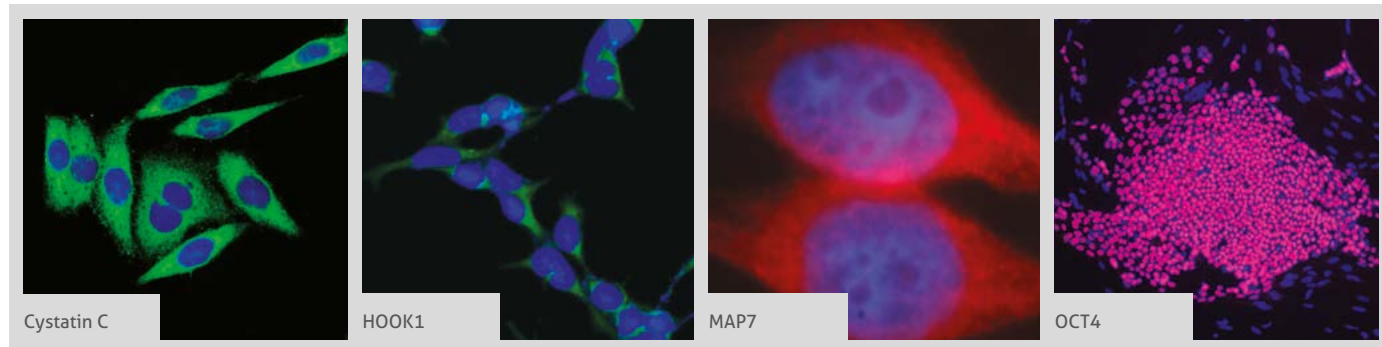
00 This number shows the amount of times our antibody has been cited in a publication.

Collagen Type III
 → leptin

| Antibody Name | Cat. No. | Type | Applications |
|-------------------------|----------------------|-------------|------------------------------|
| Collagen Type III | 22734-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| COP58 | 10089-2-AP | Rabbit Poly | ELISA, IHC, WB |
| CRTAC1 | 13001-1-AP | Rabbit Poly | ELISA, WB |
| CXCR4 | 3 60042-1-Ig | Mouse Mono | ELISA, FC, WB |
| CXCR4 | 2 11073-2-AP | Rabbit Poly | ELISA, IP, WB |
| Cystatin C | 2 12245-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| Cytokeratin 19 | 20 10712-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, WB |
| Cytokeratin 19 | 2 14965-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| Cytokeratin 19 | 60187-1-Ig | Mouse Mono | ELISA, IHC, WB |
| Cytokeratin 19-specific | 2 16858-1-AP | Rabbit Poly | ELISA, IHC, WB |
| DACH1 | 20 10914-1-AP | Rabbit Poly | ChIP, ELISA, IF, IHC, IP, WB |
| DAZL | 12633-1-AP | Rabbit Poly | ELISA, WB |
| DDX3 | 11115-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| DDX3Y | 14041-1-AP | Rabbit Poly | ELISA, IF, IHC |
| Decorin | 14667-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Desmin | 2 60226-1-Ig | Mouse Mono | ELISA, IHC, WB |
| Desmin | 4 16520-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| Desmin | 22205-1-AP | Rabbit Poly | ELISA, IHC, WB |
| DLK1 | 9 10636-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| DLX5 | 2 10592-1-AP | Rabbit Poly | ELISA, IHC, WB |
| DMD | 12715-1-AP | Rabbit Poly | ELISA, IF, WB |
| DNAJB3 | 4 17177-1-AP | Rabbit Poly | ELISA, IHC, WB |
| DPPA2 | 12689-1-AP | Rabbit Poly | ELISA, WB |
| DPPA4 | 17045-1-AP | Rabbit Poly | ELISA, WB |
| DZIP1 | 13779-1-AP | Rabbit Poly | ELISA, WB |
| EHMT2/G9a | 11595-1-AP | Rabbit Poly | ELISA, WB |
| ELAVL4 | 13032-1-AP | Rabbit Poly | ELISA, IHC, WB |
| EME1 | 12975-1-AP | Rabbit Poly | ELISA, WB |
| Endoglin/CD105 | 3 10862-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| ETV5 | 2 13011-1-AP | Rabbit Poly | ELISA, WB |
| FABP3 | 2 10676-1-AP | Rabbit Poly | ELISA, IHC, WB |
| FABP3 | 60280-1-Ig | Mouse Mono | ELISA, WB |
| FABP4 | 8 12802-1-AP | Rabbit Poly | ELISA, IHC, WB |
| FABP4 | 3 15872-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| FABP7 | 17456-1-AP | Rabbit Poly | ELISA, WB |
| FABP7 | 51010-1-AP | Rabbit Poly | ELISA, IHC, WB |
| FABP7-Specific | 14836-1-AP | Rabbit Poly | ELISA, IHC, WB |
| FAM65B | 3 17015-1-AP | Rabbit Poly | ELISA, WB |
| FATP4 | 11013-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |

| Antibody Name | Cat. No. | Type | Applications |
|-----------------|----------------------|-------------|----------------------------|
| FBX15 | 13024-1-AP | Rabbit Poly | ELISA, WB |
| FBXO32 | 12866-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| FGFR1 | 60325-1-Ig | Mouse Mono | ELISA, WB |
| FGFR2 | 13042-1-AP | Rabbit Poly | ELISA, IF, WB |
| FGFR4 | 11098-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Fibromodulin | 13281-1-AP | Rabbit Poly | ELISA, WB |
| Fibronectin | 9 15613-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| Fibronectin | 66042-1-Ig | Mouse Mono | ELISA, WB |
| FOXP1 | 22051-1-AP | Rabbit Poly | ELISA, WB |
| Frizzled 9 | 13865-1-AP | Rabbit Poly | ELISA, WB |
| GAD1 | 10408-1-AP | Rabbit Poly | ELISA |
| GATA1 | 2 60011-1-Ig | Mouse Mono | ELISA, IHC, WB |
| GATA1 | 10917-2-AP | Rabbit Poly | ELISA, IHC, WB |
| GATA2 | 2 11103-1-AP | Rabbit Poly | ELISA, IHC, IF, WB |
| GCNF | 12712-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| GFAP | 20 16825-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| GFAP | 6 60190-1-Ig | Mouse Mono | ELISA, IHC, WB |
| GFAP | 23935-1-AP | Rabbit Poly | ELISA, IHC, WB |
| GFI1 | 14198-1-AP | Rabbit Poly | ELISA, WB |
| GMF-beta | 3 10690-1-AP | Rabbit Poly | ELISA, IHC, WB |
| GPT | 16897-1-AP | Rabbit Poly | ELISA, WB |
| GREM2 | 2 13892-1-AP | Rabbit Poly | ELISA, IHC, WB |
| HESX1 | 17927-1-AP | Rabbit Poly | ELISA, IHC |
| HIRIP3 | 14992-1-AP | Rabbit Poly | ELISA, IHC, WB |
| HOOK1 | 2 10871-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| ICAM2 | 2 10121-2-AP | Rabbit Poly | ELISA, IHC, WB |
| ID1 | 4 18475-1-AP | Rabbit Poly | ELISA, IF, WB |
| IFITM3 | 29 11714-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| IFITM3 | 2 66081-1-Ig | Mouse Mono | ELISA, IF, IHC, WB |
| IGFBP3 | 2 10189-2-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| IL3RA | 13655-1-AP | Rabbit Poly | ELISA, WB |
| Integrin beta-1 | 8 12594-1-AP | Rabbit Poly | ELISA, WB |
| JMJD6 | 16476-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Kindlin 2 | 8 11453-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| KLF4 | 8 11880-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| KLF5 | 21017-1-AP | Rabbit Poly | ELISA, WB |
| Lamin A/C | 10 10298-1-AP | Rabbit Poly | ELISA, IF, FC, IP, WB |
| LEFTY2 | 13991-1-AP | Rabbit Poly | ELISA, IHC, WB |
| leptin | 17436-1-AP | Rabbit Poly | ELISA, IHC, WB |

More validation images available on our website.



| Antibody Name | Cat. No. | Type | Applications |
|----------------------|---------------|-------------|-----------------------------|
| LIN28 | 26 11724-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| Lin28A-specific | 2 16177-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Lin28B-specific | 6 16178-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| LXN | 13056-1-AP | Rabbit Poly | ELISA, IP, WB |
| MAGOH | 4 12347-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| MAP2 | 16 17490-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| MAP7 | 13446-1-AP | Rabbit Poly | ELISA, IF, IP, WB |
| MCL1 | 15 16225-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| MCL1 | 3 66026-1-Ig | Mouse Mono | ELISA, IF, IHC, WB |
| MCL1L-specific | 15825-1-AP | Rabbit Poly | ELISA, IHC |
| MEF2C | 15 10056-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| MEF2C | 16953-1-AP | Rabbit Poly | ELISA, WB |
| MEF2C | 18290-1-AP | Rabbit Poly | ELISA, IHC, WB |
| MEF2C | 18291-1-AP | Rabbit Poly | ELISA, IHC, WB |
| MEF2C | 20326-1-AP | Rabbit Poly | ELISA, IHC, WB |
| MEF2C-Specific | 18293-1-AP | Rabbit Poly | ELISA, IHC |
| MEPE | 18804-1-AP | Rabbit Poly | ELISA, WB |
| MEPE | 23256-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| MESDC2 | 10958-1-AP | Rabbit Poly | ELISA, WB |
| MME,CD10 | 2 18008-1-AP | Rabbit Poly | ELISA, FC, IHC, IP, WB |
| MME,CD10 | 10302-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| MME,CD10 | 23898-1-AP | Rabbit Poly | ELISA, FC, IF, WB |
| MOG | 3 12690-1-AP | Rabbit Poly | ELISA, Inhibition assay, WB |
| MSI2 | 2 10770-1-AP | Rabbit Poly | ELISA, IHC, WB |
| MSY2 | 13538-1-AP | Rabbit Poly | ELISA, IHC, WB |
| MTF2 | 16208-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| MTM1 | 13924-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| MYCL1 | 14584-1-AP | Rabbit Poly | ELISA, WB |
| MYCN | 3 10159-2-AP | Rabbit Poly | ELISA, WB |
| Myelin basic protein | 10458-1-AP | Rabbit Poly | ELISA, WB |

| Antibody Name | Cat. No. | Type | Applications |
|---------------|---------------|-------------|------------------------|
| MYF6 | 11754-1-AP | Rabbit Poly | ELISA, WB |
| Myocilin | 14238-1-AP | Rabbit Poly | ELISA, WB |
| MYOD1 | 3 18943-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| NANOG | 4 14295-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| NCAM1/CD56 | 5 14255-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| NCAM1/CD56 | 60238-1-Ig | Mouse Mono | ELISA, IHC, WB |
| NCAM2 | 13850-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| Nectin 2 | 10100-2-AP | Rabbit Poly | ELISA, WB |
| NEDD1 | 13993-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| NEUROD1 | 12081-1-AP | Rabbit Poly | ELISA, IHC, WB |
| NF-L | 12998-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| NF-L | 60189-1-Ig | Mouse Mono | ELISA, WB |
| NKX2-5 | 13921-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Noggin | 14772-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Notch1 | 5 10062-2-AP | Rabbit Poly | ELISA, WB |
| NT5E/CD73 | 12231-1-AP | Rabbit Poly | ELISA, WB |
| Nucleostemin | 15060-1-AP | Rabbit Poly | ELISA, IP, WB |
| OCT1 | 3 10387-1-AP | Rabbit Poly | ELISA, IHC, WB |
| OCT4 | 18 11263-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| OCT4 | 60242-1-Ig | Mouse Mono | ELISA, IHC, WB |
| OLFM1 | 10079-1-AP | Rabbit Poly | ELISA, IHC |
| OLIG2 | 3 13999-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| Osteocalcin | 23418-1-AP | Rabbit Poly | ELISA, IHC |
| p63 | 12143-1-AP | Rabbit Poly | ELISA, WB |
| PAX3 | 21386-1-AP | Rabbit Poly | ELISA, WB |
| PAX3 | 51036-2-AP | Rabbit Poly | ELISA, WB |
| PEG10 | 14412-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| PMFBP1 | 17061-1-AP | Rabbit Poly | ELISA, WB |
| PMP2 | 2 12717-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Podocalyxin | 18150-1-AP | Rabbit Poly | ELISA, FC, IHC, WB |
| PODXL2 | 16383-1-AP | Rabbit Poly | ELISA, WB |

00 This number shows the amount of times our antibody has been cited in a publication.

Wnt Signaling Pathway

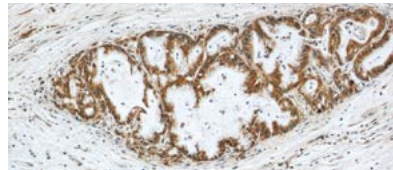
The Wnt signaling pathway is vital to both the developing and mature organism; conserved throughout the animal kingdom, it helps orchestrate the complex processes involved in building a living-being – be it nematode or human. The Wnt signaling network controls cell proliferation, stem cell maintenance and cell fate decisions, as well as organized cell movements and the establishment of tissue polarity. Its involvement in such a variety of important biological processes highlights the Wnt pathway's inherent complexity: large multi-gene families of ligands and receptors interact in an impressive amount of combinations, each eliciting a variety of intracellular responses.

The precise signaling output of Wnts depends on the repertoire of cell surface receptors present on recipient cells; for example, the Wnt-5a protein can act as an 'ON' or 'OFF' ligand: it can activate the formation of the β -catenin/T-cell factor (TCF) transcriptional complexes to modulate the transcription of Wnt responsive genes or it can inhibit this β -catenin-dependent pathway upon binding to the receptor tyrosine kinase ROR2.

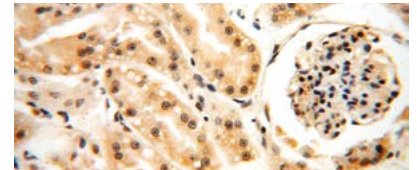
The β -catenin-dependent pathway is the best known of the Wnt pathway responses, yet, Wnt proteins are also thought to mediate

the activation of other intracellular messengers such as calcium fluxes, JNK and SRC kinases to name but a few. As well as the Wnt signalling pathway's role in health and development, it is also an underlying cause of many diseases. The hyperactivation of β -catenin signaling has been implicated as a driver of various cancers – in particular colon cancer – whereas its hypoactivity underlies certain neurodegenerative diseases and abnormal bone formation. Consequently, there is a great interest in inhibitors or activators of this pathway.

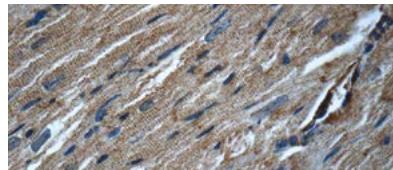
Related Antibodies



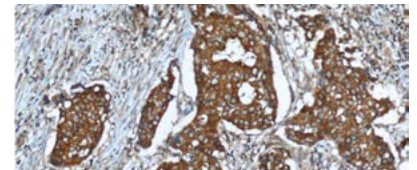
Immunohistochemical of paraffin-embedded human pancreas cancer using CMTM8 antibody (15039-1-AP) at a dilution of 1:50 (10x objective).



Immunohistochemical of paraffin-embedded human kidney using HDAC4 antibody (17449-1-AP) at a dilution of 1:100 (40x objective).



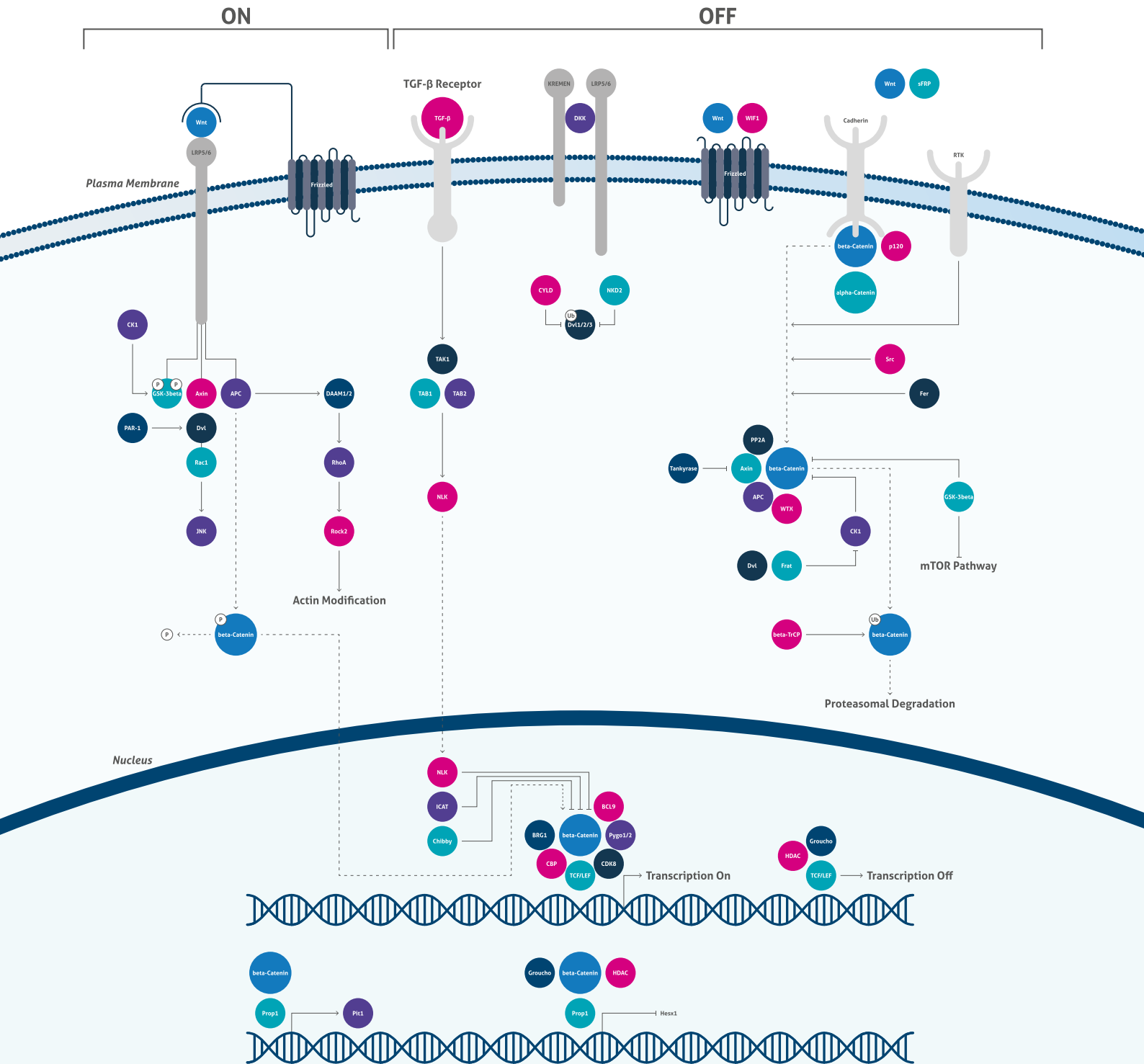
Immunohistochemistry of paraffin-embedded mouse heart tissue slide using JNK antibody (10023-1-AP) at a dilution of 1:50 (40x objective).



Immunohistochemistry of paraffin-embedded human breast cancer tissue slide using c-SRC (60315-1-Ig) antibody at a dilution of 1:200 (10x objective). Heat-mediated antigen retrieval with Tris-EDTA buffer (pH9).

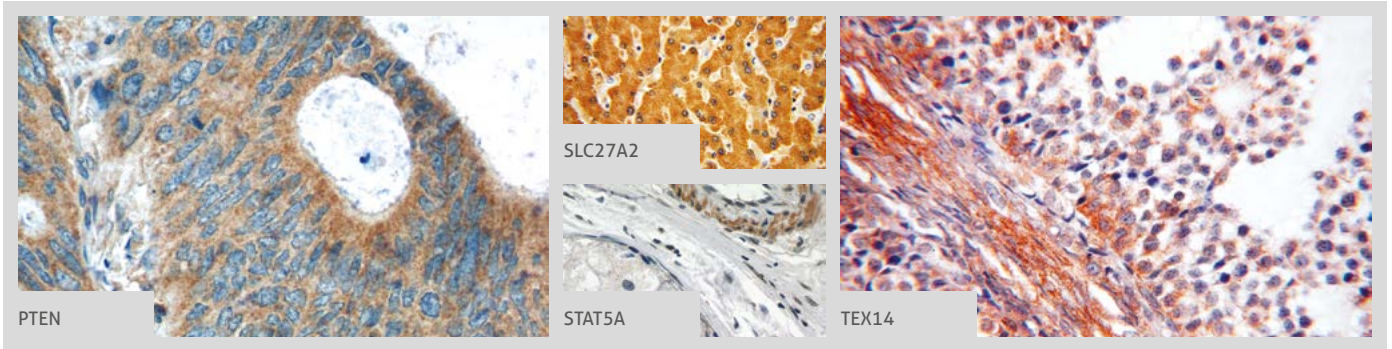
Legend

| | | | |
|------------|----------------------|---|----------------|
| — | Association | — | Inhibits |
| —→ | Directly Activates | Ⓟ | Phosphorylates |
| - - - - -> | Indirectly Activates | Ⓤ | Ubiquitin |



PPAR gamma
→ WDR5

More validation images available on our website. 



| Antibody Name | Cat. No. | Type | Applications |
|----------------|----------------------|-------------|---|
| PPAR gamma | 23 16643-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| PPAR gamma | 22061-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| PPAR gamma | 60127-1-Ig | Mouse Mono | ELISA, IHC, WB |
| PSCA | 17171-1-AP | Rabbit Poly | ELISA, WB |
| PTEN | 9 22034-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| PTEN | 5 60300-1-Ig | Mouse Mono | ELISA, IF, IHC, WB |
| PTHLH | 10817-1-AP | Rabbit Poly | ELISA, WB |
| PUM2 | 11586-1-AP | Rabbit Poly | ELISA, WB |
| RBM15 | 9 10587-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| RBM15 | 2 66059-1-Ig | Mouse Mono | ELISA, IF, WB |
| REX1 | 13503-1-AP | Rabbit Poly | ELISA, IF |
| RING1 | 15037-1-AP | Rabbit Poly | ELISA, IHC, WB |
| ROBO3 | 11982-1-AP | Rabbit Poly | ELISA, IHC, WB |
| ROBO3-Specific | 20220-1-AP | Rabbit Poly | ELISA, IHC, WB |
| RTN4R | 11359-1-AP | Rabbit Poly | ELISA, IHC |
| S100B | 3 15146-1-AP | Rabbit Poly | ELISA, IHC, WB |
| SFRP2 | 2 12189-1-AP | Rabbit Poly | ELISA, IHC, WB |
| SIPA1 | 12691-1-AP | Rabbit Poly | ELISA, WB |
| SIX2 | 75 11562-1-AP | Rabbit Poly | ChIP, ELISA, IF, IHC, IP, Pull-down, WB |
| SLAM/CD150 | 10949-2-AP | Rabbit Poly | ELISA, WB |
| SLC27A2 | 14048-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| SMAD2 | 14 12570-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| SNAI2 | 4 12129-1-AP | Rabbit Poly | ELISA, IHC, WB |
| SNX6 | 10114-1-AP | Rabbit Poly | ELISA, IHC, WB |
| SOX10 | 10422-1-AP | Rabbit Poly | ELISA |
| SOX15 | 25415-1-AP | Rabbit Poly | ELISA, WB |
| SOX2 | 12 11064-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| SOX2 | 4 20118-1-AP | Rabbit Poly | ELISA, WB |
| SPAG6 | 12462-1-AP | Rabbit Poly | ELISA, WB |
| SPAG8 | 13915-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| SPARC | 7 15274-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |

| Antibody Name | Cat. No. | Type | Applications |
|-----------------|----------------------|-------------|----------------------------------|
| SPATA6 | 11849-1-AP | Rabbit Poly | ELISA, IHC, WB |
| SPRY2 | 11383-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |
| Stanniocalcin 2 | 4 10314-1-AP | Rabbit Poly | ELISA, IHC, WB |
| Stanniocalcin 2 | 60063-1-Ig | Mouse Mono | ELISA, IF, IHC, WB |
| STAT3 | 11 10253-2-AP | Rabbit Poly | ChIP, ELISA, FC, IF, IHC, IP, WB |
| STAT3 | 2 51076-2-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| STAT3 | 60199-1-Ig | Mouse Mono | ELISA, IF, IHC, IP, WB |
| STAT5A | 13179-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| STAT5A | 51074-2-AP | Rabbit Poly | ELISA, IHC, WB |
| STAT5B | 12071-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| STAT5B | 51072-2-AP | Rabbit Poly | ELISA, WB |
| TAGLN3 | 12246-1-AP | Rabbit Poly | ELISA, IHC, WB |
| TBX2 | 16930-1-AP | Rabbit Poly | ELISA, IHC, WB |
| TBX2 | 22346-1-AP | Rabbit Poly | ELISA, IF, WB |
| TBX3 | 2 16741-1-AP | Rabbit Poly | ELISA, WB |
| TBX5 | 13178-1-AP | Rabbit Poly | ELISA, WB |
| TBX6 | 12447-1-AP | Rabbit Poly | ELISA, WB |
| TCP11 | 14606-1-AP | Rabbit Poly | ELISA, WB |
| TEX14 | 18351-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| TLE3 | 4 11372-1-AP | Rabbit Poly | ChIP, ELISA, IF, IHC, IP, WB |
| TLE3 | 22094-1-AP | Rabbit Poly | ELISA, IF, IHC, IP, WB |
| TLE3 | 66083-1-Ig | Mouse Mono | ELISA, IHC, IP, WB |
| TNNT1 | 15893-1-AP | Rabbit Poly | ELISA, WB |
| TRAF4 | 10083-2-AP | Rabbit Poly | ELISA, IHC, WB |
| TRIM69 | 12951-1-AP | Rabbit Poly | ELISA, IHC, WB |
| VAV1 | 16364-1-AP | Rabbit Poly | ELISA, IHC, IP, WB |
| VCAM-1 | 10 11444-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, IP, WB |
| Vimentin | 65 10366-1-AP | Rabbit Poly | ELISA, FC, IF, IHC, WB |
| Vimentin | 22031-1-AP | Rabbit Poly | ELISA, WB |
| WDR5 | 15544-1-AP | Rabbit Poly | ELISA, IF, IHC, WB |

00 This number shows the amount of times our antibody has been cited in a publication.

CONTACT US

Proteintech Group

US Head Office

PHONE 1 (888) 4PTGLAB
(1-888-478-4522)
(toll free in USA),
or 1(312) 455-8498
(outside USA)

FAX 1 (312) 455-8408

ADDRESS Proteintech Group, Inc.
5400 Pearl Street, Suite 300,
Rosemont, IL 60018, USA

EMAIL proteintech@ptglab.com

Proteintech Europe

United Kingdom

PHONE +44 (161) 8393007

FAX +44 (161) 2413103

ADDRESS Proteintech Europe, Ltd.
4th Floor,
196 Deansgate,
Manchester, M3 3WF

EMAIL europe@ptglab.com

Proteintech Europe

Germany

EMAIL germany@ptglab.com
Sales and technical support only.

Proteintech

China Office

PHONE 027-87531629
or 4006-900-926

FAX 027-87531627

ADDRESS Wuhan Sanying Biotechnologies
D3-3, No.666 Gaoxin Avenue,
Wuhan East Lake Hi-tech Development Zone
Wuhan, Hubei, P.R.C

EMAIL service@ptglab.com

Support

Available 24 hours via Live Chat and 9-5 (CDT) via phone.

Email support also available.

LIVE CHAT
www.ptglab.com

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