

Beta Actin Recombinant antibody

Catalog Number: 81115-1-RR

233 Publications

Basic Information

Catalog Number: 81115-1-RR	GenBank Accession Number: BC002409	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 60	CloneNo.: 4H1
Source: Rabbit	UNIPROT ID: P60709	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000 IF 1:950-1:3800
Isotype: IgG	Full Name: actin, beta	
Immunogen Catalog Number: AG14521	Calculated MW: 375 aa, 42 kDa	
	Observed MW: 42 kDa	

Applications

Tested Applications: IF, IHC, WB, ELISA	Positive Controls:
Cited Applications: IF, WB	WB : HeLa cells, HEK-293 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, rat brain tissue, mouse brain tissue, pig brain tissue
Species Specificity: Human, pig, rat, mouse	IHC : rat colon tissue,
Cited Species: human, chicken, rat, mouse, monkey, pig	IF : U2OS cells, A549 cells

Note-IHC: suggested antigen retrieval with *TE buffer pH 9.0*; (*) Alternatively, antigen retrieval may be performed with *citrate buffer pH 6.0*

Background Information

Beta Actin, also named as ACTB and F-Actin, belongs to the actin family. Actins are highly conserved globular proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. At least six isoforms of actins are known in mammals and other vertebrates: alpha (ACTC1, cardiac muscle 1), alpha 1 (ACTA1, skeletal muscle) and 2 (ACTA2, aortic smooth muscle), beta (ACTB), gamma 1 (ACTG1) and 2 (ACTG2, enteric smooth muscle). Beta and gamma 1 are two non-muscle actin proteins. Most actins consist of 376aa, while ACTG2 (rich in muscles) has 375aa and ACTG1(found in non-muscle cells) has only 374aa. Beta actin has been widely used as the internal control in RT-PCR and Western Blotting as a 42-kDa protein. However, the 37-40, 31, 15 kDa cleaved fragment of beta actin can be generated during apoptosis process. This antibody was generated against N-terminal region of human beta actin protein and can cross-react with other actins. (9173887, 11217076, 10229193)

Notable Publications

Author	Pubmed ID	Journal	Application
Xin Xu	36178722	Environ Toxicol	WB
Jiying Hou	36077440	Int J Mol Sci	WB
Jialiang Luo	36327873	Int Immunopharmacol	WB

Storage

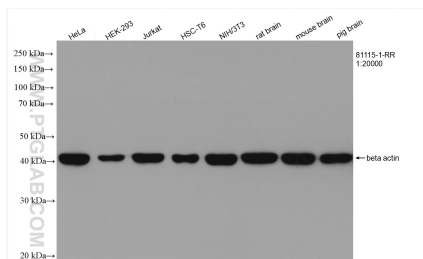
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
 Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1%BSA**

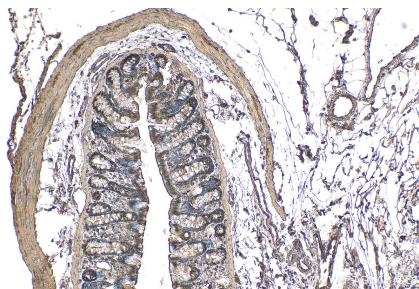
For technical support and original validation data for this product please contact:
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
 E: proteintech@ptglab.com
 W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

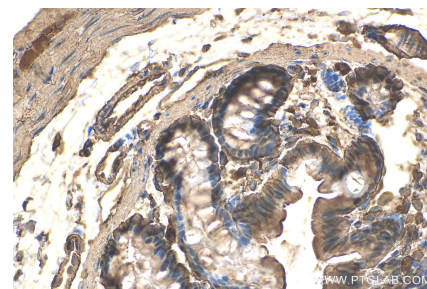
Selected Validation Data



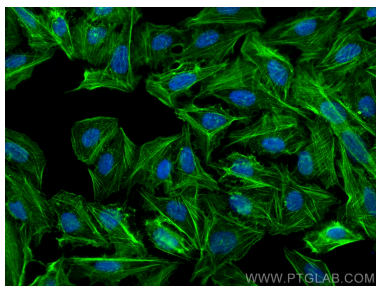
Various lysates were subjected to SDS PAGE followed by western blot with 81115-1-RR (beta actin antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using 81115-1-RR (Beta Actin antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using 81115-1-RR (Beta Actin antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using beta actin antibody (81115-1-RR, Clone: 4H1) at dilution of 1:1900 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).