

For Research Use Only

# FFAR3 Monoclonal antibody

Catalog Number: 66811-1-Ig **11 Publications**



## Basic Information

|  |   |  |
|--|---|--|
| <b>Catalog Number:</b><br>66811-1-Ig   | <b>GenBank Accession Number:</b><br>BC035657    | <b>Purification Method:</b><br>Protein G purification                                    |
| <b>Size:</b><br>150ul , Concentration: 1400 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard; | <b>GeneID (NCBI):</b><br>2865                   | <b>CloneNo.:</b><br>1D10B7   |
| <b>Source:</b><br>Mouse  | <b>UNIPROT ID:</b><br>O14843                    | <b>Recommended Dilutions:</b><br>WB 1:500-1:3000<br>IHC 1:200-1:800<br>IF/ICC 1:50-1:500 |
| <b>Isotype:</b><br>IgG1  | <b>Full Name:</b><br>free fatty acid receptor 3 |  |
| <b>Immunogen Catalog Number:</b><br>AG28025  | <b>Calculated MW:</b><br>39 kDa                 |  |
|  | <b>Observed MW:</b><br>40-48 kDa                |  |

## Applications

|  |  |
|--|--|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, ELISA  | <b>Positive Controls:</b><br>WB : HepG2 cells, human adipose tissue, HT-29 cells<br>IHC : human liver cancer tissue,<br>IF/ICC : A549 cells, |
| <b>Cited Applications:</b><br>WB, IF   |  |
| <b>Species Specificity:</b><br>Human   |  |
| <b>Cited Species:</b><br>human, mouse, rat, pig  |  |
| <b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b> |  |

## Background Information

FFAR3 (Free fatty acid receptors 3) also known as GPR41, with another GPR43 protein, both are Gai-coupled receptor activated by short-chain fatty acids (SCFAs) such as acetate, propionate, and butyrate (PMID:26870043). GPR41 protein is translated from the bicistronic mRNA encoding GPR40 and GPR41, where an internal ribosome entry site (IRES) is utilized for the GPR41 coding sequence downstream of GPR40 (PMID:22493486). GPR41 is expressed in adipose tissue, gut, and the peripheral nervous system, and it is involved in SCFA-dependent energy regulation (PMID: 24904531).

## Notable Publications

| Author         | Pubmed ID | Journal             | Application |
|----------------|-----------|---------------------|-------------|
| Pawet Piatek   | 35935952  | Front Immunol       | IF          |
| Changheng Song | 39741920  | Drug Des Devel Ther | WB          |
| YanJun Jiang   | 39706182  | Cell Host Microbe   |             |

## Storage

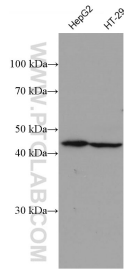
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

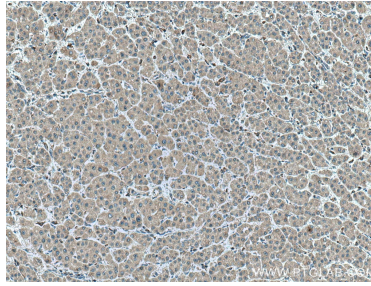
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

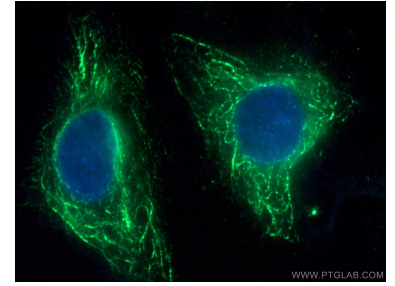
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 66811-1-Ig (FFAR3 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66811-1-Ig (FFAR3 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed A549 cells using 66811-1-Ig (FFAR3 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).