

For Research Use Only

FAT10 Polyclonal antibody

Catalog Number: 13003-2-AP

Featured Product

15 Publications



Basic Information

Catalog Number:

13003-2-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3680

GenBank Accession Number:

BC012472

GeneID (NCBI):

10537

UNIPROT ID:

O15205

Full Name:

ubiquitin D

Calculated MW:

165 aa, 18 kDa

Observed MW:

20 kDa, 70kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:500-1:2000

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human

Cited Species:

human, mouse, rat

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

Positive Controls:

WB : TNF alpha and IFN gamma treated HepG2 cells,

IHC : human tonsillitis tissue, human lung cancer tissue, human lymphoma tissue, human stomach cancer tissue

Background Information

FAT10, also named UBD, contains two ubiquitin-like domains. It is a ubiquitin-like protein modifier that can be covalently attached to the target protein and subsequently leads to their degradation by the 26S proteasome, in a NUB1L-dependent manner. FAT10 also has important roles in cell mitosis, chromosome instability, apoptosis, and immune response. FAT10 mediates apoptosis in a caspase-dependent manner, especially in the renal epithelium and tubular cells during renal diseases such as polycystic kidney disease and Human immunodeficiency virus (HIV)-associated nephropathy (HIVAN). It promotes the expression of the proteasome subunit beta type-9 (PSMB9/LMP2). FAT10 regulates TNF-alpha-induced and LPS-mediated activation of the central mediator of innate immunity NF-kappa-B by promoting TNF-alpha-mediated proteasomal degradation of ubiquitinated-I-kappa-B-alpha. It may be involved in dendritic cell (DC) maturation, the process by which immature dendritic cells differentiate into fully competent antigen-presenting cells that initiate T-cell responses. FAT10 may be a marker for precancerous lesions and may promote cancer progression. This antibody is a rabbit polyclonal antibody raised against full-length FAT10 of human origin.

Notable Publications

Author	Pubmed ID	Journal	Application
Masayuki Kimura	26558467	J Toxicol Sci	
Masayuki Kimura	26011634	J Appl Toxicol	IHC
Anuj Sehgal	27663963	Immunobiology	IF

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

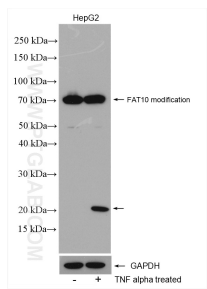
For technical support and original validation data for this product please contact:

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

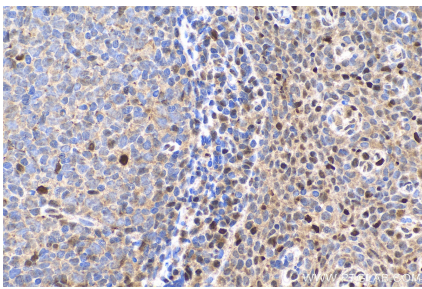
E: proteintech@ptglab.com
W: ptglab.com

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

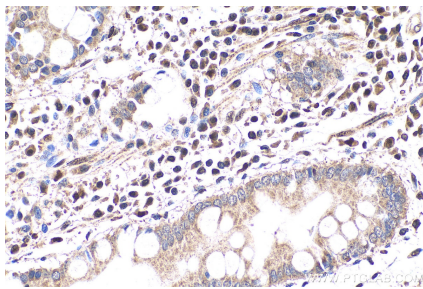
Selected Validation Data



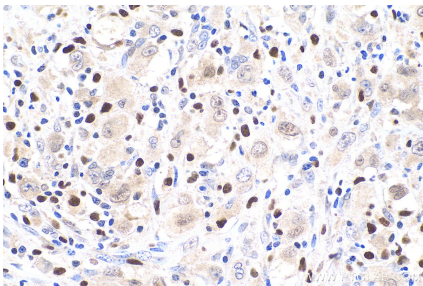
TNF alpha and IFN gamma treated HepG2 cells were subjected to SDS PAGE followed by western blot with 13003-2-AP (FAT10 antibody) at dilution of 1:1000 and incubated at room temperature for 1.5 hours.



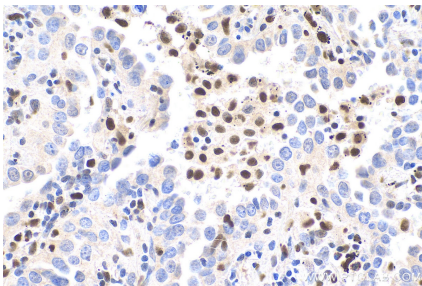
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 13003-2-AP (FAT10 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 13003-2-AP (FAT10 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 13003-2-AP (FAT10 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 13003-2-AP (FAT10 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).