

# FAT10 Polyclonal antibody

Catalog Number: 13003-2-AP

Featured Product

12 Publications

## Basic Information

## Catalog Number:

13003-2-AP

## Size:

150ul, Concentration: 500 µg/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:

IHC, WB, ELISA

## Cited Applications:

WB, IHC, IF

## Species Specificity:

human

## Cited Species:

human, rat, mouse

**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

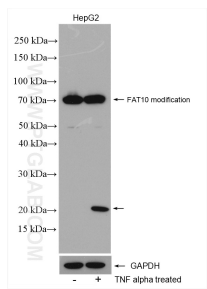
For technical support and original validation data for this product please contact:

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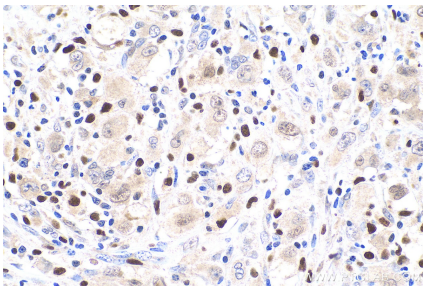
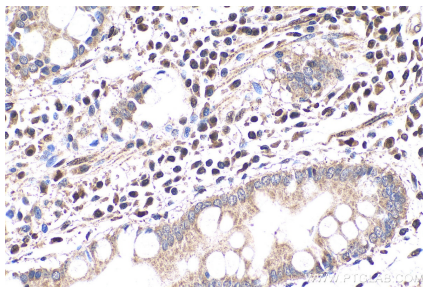
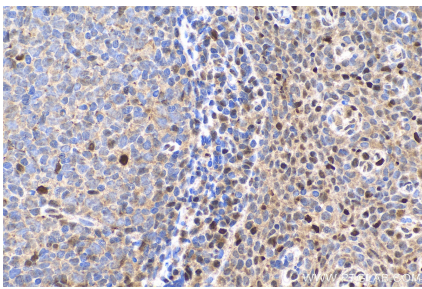
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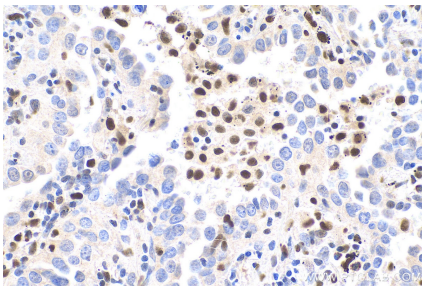
## Selected Validation Data



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 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).