

For Research Use Only

# FUT4 Polyclonal antibody

Catalog Number: 19497-1-AP

Featured Product

24 Publications



## Basic Information

### Catalog Number:

19497-1-AP

### Size:

600 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_002033

### GeneID (NCBI):

2526

### UNIPROT ID:

P22083

### Full Name:

fucosyltransferase 4 (alpha (1,3)  
fucosyltransferase, myeloid-specific)

### Calculated MW:

59 kDa

### Observed MW:

95-140 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total  
protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human

### Cited Species:

human, mouse

### Positive Controls:

**WB** : HeLa cells, HepG2 cells, HL-60 cells, Jurkat cells,  
SGC-7901 cells

**IP** : HeLa cells,

**IHC** : human lung cancer tissue, human gliomas tissue,  
human skin cancer tissue, human stomach cancer  
tissue

**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

FUT4, also named as ELFT and FCT3A, belongs to the glycosyltransferase 10 family. FUT4 may catalyze alpha-1,3 glycosidic linkages involved in the expression of Lewis X/SSEA-1 and VIM-2 antigens. The expression of CD15 (acts as a terminal glycotope in glycoproteins and glycolipids) is directed by FUT4 in promyelocytes and monocytes. FUT4 is an antigenic epitope defined as a Lewis X carbohydrate structure is expressed on murine embryonal carcinoma cells (EC), murine ES and iPS cells, and murine and human germ cells. It is widely used as a positive surface marker for mouse undifferentiated ES and iPS cells and a negative surface marker for human undifferentiated ES and iPS cells. Expression is down-regulated following differentiation of murine EC and ES cells, while the differentiation of human EC and ES cells is accompanied by an increase in FUT4 expression. FUT4 is associated with cell adhesion, migration and differentiation. 19497-1-AP antibody detects the glycosylated isoform proteins around 95-140 kDa in SDS-PAGE. (PMID: 28706275, 28914881, 11278338)

## Notable Publications

Author	Pubmed ID	Journal	Application
Faisal Aziz	26427350	Toxicol In Vitro	WB, IF
Qin Zheng	28914881	Cell Death Differ	WB,IF
Chaoyue Zhong	36139441	Cells	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

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

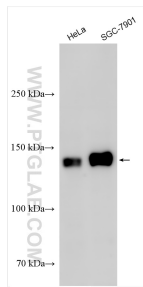
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

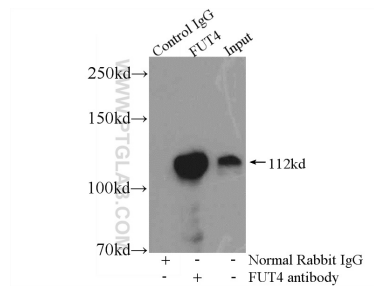
W: [ptgcn.com](http://ptgcn.com)

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

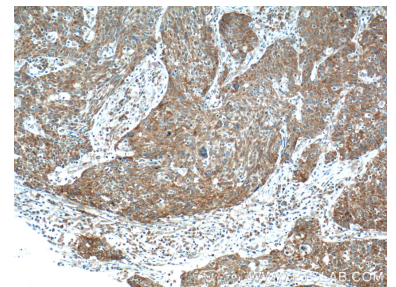
## Selected Validation Data



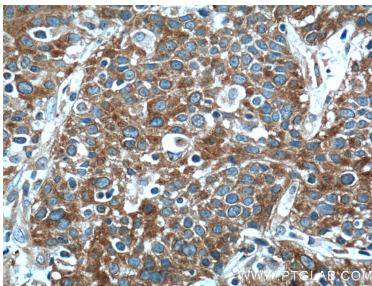
Various lysates were subjected to SDS PAGE followed by western blot with 19497-1-AP (FUT4 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



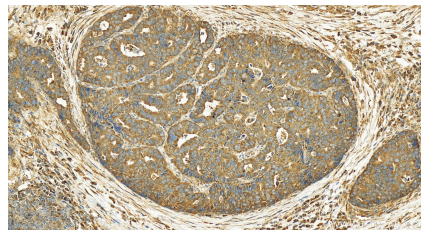
IP result of anti-FUT4 (IP:19497-1-AP, 4ug; Detection:19497-1-AP 1:500) with HeLa cells lysate 2480ug.



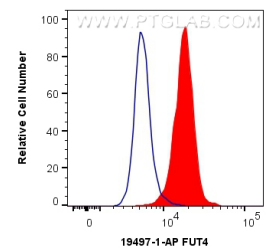
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19497-1-AP (FUT4 Antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19497-1-AP (FUT4 Antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded stomach cancer slide using 19497-1-AP (FUT4 antibody) at dilution of 1:100 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> A375 cells were intracellularly stained with 0.5 ug Anti-Human FUT4 (19497-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).