

For Research Use Only

FUT4 Polyclonal antibody

Catalog Number: 19497-1-AP

Featured Product

24 Publications



Basic Information

Catalog Number:

19497-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop and 300 ug/ml by Bradford method using BSA as the standard;

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

*** 20ul sizes contain 0.1% BSA

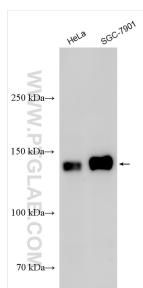
For technical support and original validation data for this product please contact:

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

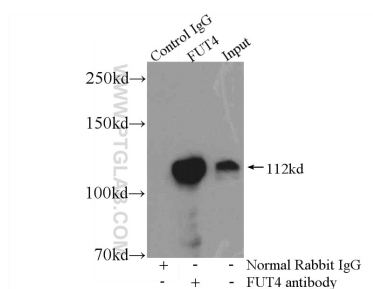
E: proteintech@ptglab.com
W: ptglab.com

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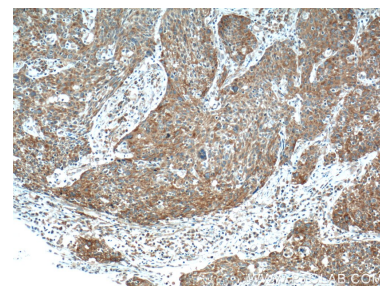
Selected Validation Data



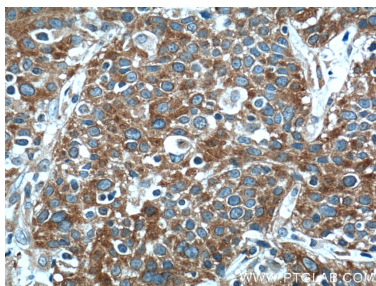
Various lysates were subjected to SDS PAGE followed by western blot with 19497-1-AP (FUT4 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



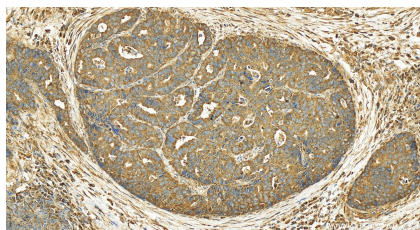
IP result of anti-FUT4 (IP:19497-1-AP, 4ug; Detection:19497-1-AP 1:500) with HeLa cells lysate 2480ug.



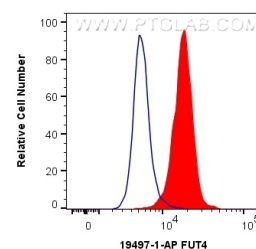
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19497-1-AP (FUT4 Antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10⁶ 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).