

# FUT4 Polyclonal antibody

Catalog Number: 22141-1-AP

## Basic Information

<b>Catalog Number:</b> 22141-1-AP	<b>GenBank Accession Number:</b> BC136374	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 700 ug/ml by Nanodrop and 460 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 2526	<b>Recommended Dilutions:</b> WB 1:200-1:1000 IHC 1:50-1:500 IF/ICC 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P22083	
<b>Isotype:</b> IgG	<b>Full Name:</b> fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific)	
<b>Immunogen Catalog Number:</b> AG17565	<b>Calculated MW:</b> 530 aa, 59 kDa	
	<b>Observed MW:</b> 45 kDa, 63 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human	<b>WB:</b> Jurkat cells, A431 cells
<b>Note-IHC:</b> suggested antigen retrieval with <b>TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC:</b> human lung cancer tissue, <b>IF/ICC:</b> A431 cells,

## 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. 22141-1-AP detects the band around 45 kDa and glycosylated isoform 63 kDa protein in SDS-PAGE. (PMID: 22287018, 17335083, 11278338)

## Storage

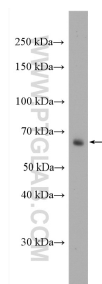
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

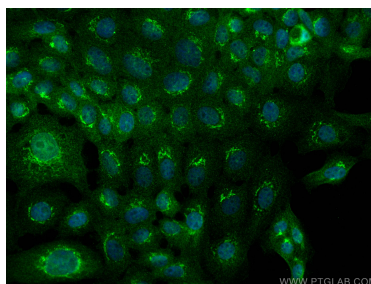
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

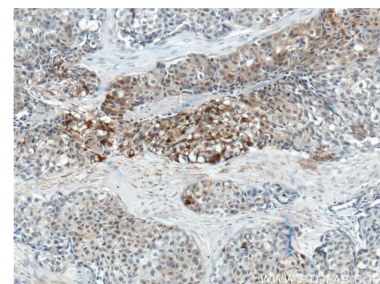
## Selected Validation Data



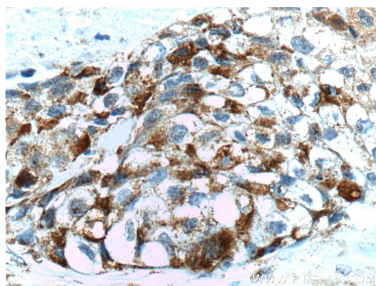
Jurkat cells were subjected to SDS PAGE followed by western blot with 22141-1-AP (FUT4 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed A431 cells using FUT4 antibody (22141-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22141-1-AP (FUT4 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22141-1-AP (FUT4 Antibody) at dilution of 1:200 (under 40x lens).