For Research Use Only

FUT4 Polyclonal antibody

Catalog Number: 22141-1-AP



Basic Information

Catalog Number: GenBank Accession Number: 22141-1-AP

BC136374

GeneID (NCBI):

150ul, Concentration: 700 µg/ml by Nanodrop and 460 µg/ml by Bradford

method using BSA as the standard;

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

Rabbit Calculated MW: Isotype: 530 aa, 59 kDa IgG Observed MW: 45 kDa, 63 kDa Immunogen Catalog Number:

AG17565

Applications

Tested Applications:

IF THE WRIFTISA

Species Specificity:

human

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

buffer pH 6.0

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:200-1:1000 IHC 1:20-1:200 IF 1:20-1:200

Positive Controls:

WB: Jurkat cells, A431 cells

IHC: human breast cancer tissue, human lung cancer

IF: 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

Store at -20°C. Stable for one year after shipment.

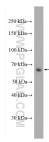
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

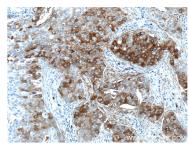
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

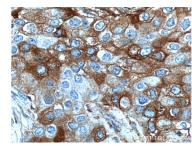
Selected Validation Data



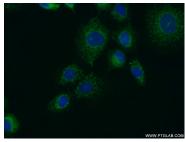
Jurkat cells were subjected to SDS PAGE followed by western blot with 22141-1-AP (FUT4 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



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



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



Immunofluorescent analysis of (-20°C Ethanol) fixed A431 cells using 22141-1-AP (FUT4 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).