

For Research Use Only

# ST3GAL5 Polyclonal antibody

Catalog Number: 14614-1-AP

Featured Product

5 Publications



## Basic Information

### Catalog Number:

14614-1-AP

### Size:

150ul, Concentration: 227 ug/ml by Nanodrop and 227 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6207

### GenBank Accession Number:

BC065936

### GeneID (NCBI):

8869

### UNIPROT ID:

Q9UNP4

### Full Name:

ST3 beta-galactoside alpha-2,3-sialyltransferase 5

### Calculated MW:

48 kDa

### Observed MW:

45-50 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

### Positive Controls:

**WB**: HEK-293 cells, Jurkat cells, HeLa cells, human testis tissue, human placenta tissue

**IHC**: mouse skeletal muscle tissue, human skeletal muscle tissue, human skin 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

ST3GAL5 is also named as SIAT9, GM3 synthase, ST3Gal V, Sialyltransferase 9 and belongs to the glycosyltransferase 29 family. ST3GAL5 transfers the sialyl group (N-acetyl-alpha-neuraminy or NeuAc) from CMP-NeuAc to the non-reducing terminal galactose of glycosphingolipids forming gangliosides (PMID:9822625, PMID:16934889). SIAT9 is mainly involved in the biosynthesis of ganglioside GM3 but can also use different glycolipids as substrate acceptors such as D-galactosylceramide (GalCer), asialo-GM2 (GA2) and asialo-GM1 (GA1) (PMID:16934889). ST3GAL5 is highly expressed in brain, skeletal muscle, placenta, and testis. And mRNA of ST3GAL5 is widely distributed in human brain, but slightly elevated expression was observed in the cerebral cortex, temporal lobe, and putamen (PMID:9822625). ST3GAL5 has 3 isoforms with the molecular mass of 45, 46, and 48 kDa. Sometimes the band of 70 kDa can also be observed, which may be a glycosylated form of ST3GAL5 (PMID:34943806, PMID:26458842).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jiakuan Liu	36172374	Front Immunol	IHC
Norihiko Sasaki	36313564	Front Cell Dev Biol	WB
Yuli Jian	38959540	Int Immunopharmacol	WB,IHC

## 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

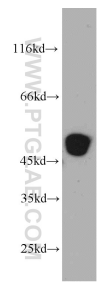
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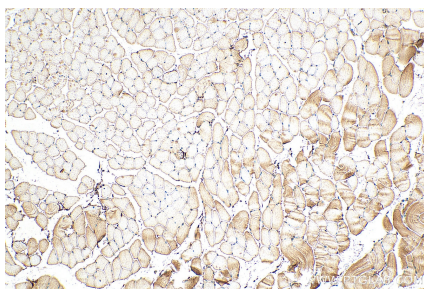
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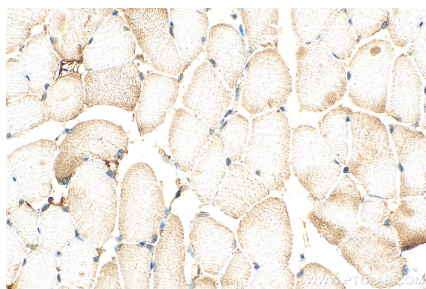
## Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with 14614-1-AP (ST3GAL5 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 14614-1-AP (ST3GAL5 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 14614-1-AP (ST3GAL5 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).