



### **CHST3 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55347

### **Specification**

### **CHST3 Polyclonal Antibody - Product Information**

Application
Primary Accession
Host
Clonality

Calculated MW Physical State Immunogen

**Epitope Specificity** 

Isotype **Purity** 

affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION SIMILARITY

Post-translational modifications

**DISEASE** 

Important Note

WB, IHC-P, IHC-F, IF, ICC

O7LGC8
Rabbit
Polyclonal
55 KDa
Liquid

KLH conjugated synthetic peptide derived

from human CHST3

21-120/479

IqG

0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol. Golgi apparatus membrane.

Belongs to the sulfotransferase 1 family.

Gal/GlcNAc/GalNAc subfamily. Widely expressed in adult tissues. Expressed in heart, placenta, skeletal muscle and pancreas. Also expressed in various immune tissues such as spleen, lymph node, thymus and appendix. Defects in CHST3 are a cause of spondyloepiphyseal dysplasia with congenital joint dislocations (SEDC-JD) [MIM:143095]. A bone dysplasia clinically characterized by dislocation of the knees and/or hips at birth, clubfoot, elbow joint dysplasia with subluxation and limited extension, short stature, and progressive kyphosis developing in late childhood. The disorder is usually evident at birth, with

short stature and multiple joint dislocations or subluxations that dominate

the neonatal clinical and radiographic picture. During childhood, the dislocations improve, both spontaneously and with surgical treatment, and features of spondyloepiphyseal dysplasia become apparent, leading to arthritis of the hips and spine with intervertebral disk degeneration, rigid kyphoscoliosis, and trunk shortening by late childhood. This product as supplied is intended for



research use only, not for use in human, therapeutic or diagnostic applications.

## **Background Descriptions**

This gene encodes an enzyme which catalyzes the sulfation of chondroitin, a proteoglycan found in the extracellular matrix and most cells which is involved in cell migration and differentiation. Mutations in this gene are associated with spondylepiphyseal dysplasia and humerospinal dysostosis. [provided by RefSeq, Mar 2009]

### **CHST3 Polyclonal Antibody - Additional Information**

#### **Gene ID 9469**

### **Other Names**

Carbohydrate sulfotransferase 3, 2.8.2.17, Chondroitin 6-O-sulfotransferase 1, C6ST-1, Chondroitin 6-sulfotransferase, Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 0, GST-0, CHST3

### **Dilution**

```
<span class ="dilution_WB">WB~~1:1000</span><br \> <span class
="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class ="dilution_ICC">ICC~~N/A</span>
```

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **CHST3 Polyclonal Antibody - Protein Information**

### Name CHST3

## **Function**

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of the N-acetylgalactosamine (GalNAc) residue of chondroitin (PubMed:<a href="http://www.uniprot.org/citations/15215498" target="\_blank">15215498</a>, PubMed:<a href="http://www.uniprot.org/citations/9714738" target="\_blank">9714738</a>, PubMed:<a href="http://www.uniprot.org/citations/9883891" target="\_blank">9883891</a>). Chondroitin sulfate constitutes the predominant proteoglycan present in cartilage and is distributed on the surfaces of many cells and extracellular matrices (PubMed:<a href="http://www.uniprot.org/citations/9714738" target="\_blank">9714738</a>). Catalyzes with a lower efficiency the sulfation of Gal residues of keratan sulfate, another glycosaminoglycan (PubMed:<a href="http://www.uniprot.org/citations/9714738" target="\_blank">9714738</a>). Can also catalyze the sulfation of the Gal residues in sialyl N-acetyllactosamine (sialyl LacNAc) oligosaccharides (By similarity). May play a role in the maintenance of naive T-lymphocytes in the spleen (By similarity).

### **Cellular Location**

Golgi apparatus membrane; Single- pass type II membrane protein

# **Tissue Location**



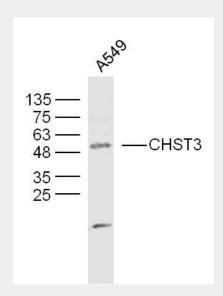
Widely expressed in adult tissues. Expressed in heart, placenta, skeletal muscle and pancreas. Also expressed in various immune tissues such as spleen, lymph node, thymus and appendix

## **CHST3 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **CHST3 Polyclonal Antibody - Images**

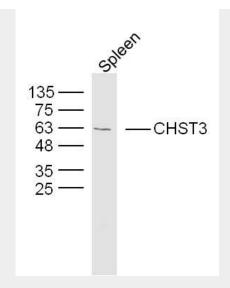


Sample: A549 (human)Cell Lysate at 40 ug Primary: Anti-CHST(bs-13935R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD Observed band size: 55 kD



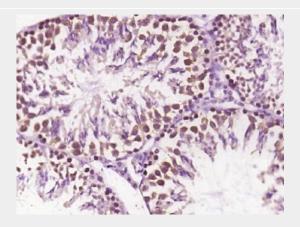


Sample: Spleen (Mouse) Lysate at 40 ug

Primary: Anti-CHST3(bs-13935R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD Observed band size: 60 kD



Paraformaldehyde-fixed, paraffin embedded (mouse testis tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CHST3) Polyclonal Antibody, Unconjugated (bs-13935R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.