

DESCRIPTION

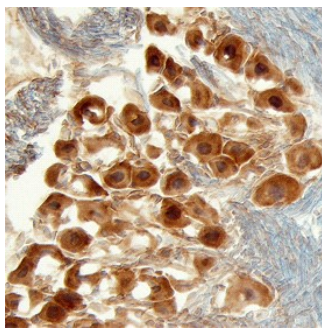
Species Reactivity	Mouse
Specificity	Detects mouse Heparan Sulfate 6-O-Sulfotransferase/HS6ST3 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Heparan Sulfate 6-O-Sulfotransferase/HS6ST3 Pro28-Trp470 Accession # NP_056635
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Immunohistochemistry</p> 	<p>Heparan Sulfate 6-O-Sulfotransferase 3/HS6ST3 in Mouse Brain. Heparan Sulfate 6-O-Sulfotransferase 3/HS6ST3 was detected in perfusion fixed frozen sections of mouse brain (trigeminal ganglion) using Sheep Anti-Mouse Heparan Sulfate 6-O-Sulfotransferase 3/HS6ST3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5406) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neuronal cell bodies. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HS6ST3 (Heparan sulfate 6-O-sulfotransferase 3) is a 60-62 kDa member of the sulfotransferase 6 family of enzymes. It is one of three 6-O sulfotransferase isoforms, all of which essentially perform the same function, but all of which are the products of distinct genes. HS6ST3 is known to sulfate the #6 position of glucosamine sulfate that is linked to a 2-O-sulfated iduronic acid in heparan sulfate. The molecule shows a temporal expression pattern, being found in postnatal cerebellar Purkinje cells and cerebral cortical pyramidal cells in layers II/III and V. Mouse HS6ST3 is a 470 amino acid (aa) type II transmembrane glycoprotein. It contains a short four aa cytoplasmic N-terminus coupled to an extended 443 aa luminal domain (aa 28-470). The luminal domain contains a stem region (aa 28-83) that mediates oligomerization and Golgi localization, plus a sulfotransferase enzyme domain (aa 142-409). Cleavage within the stem region by β-secretase generates a soluble form of HS6ST3. Over aa 28-470, mouse HS6ST3 shares 99% and 95% aa identity with rat and human HS6ST3, respectively.