# Human Heparan Sulfate 2-O-Sulfotransferase 1/HS2ST1 Alexa Fluor® 488-conjugated Antibody

Monoclonal Mouse $IgG_1$ Clone # 738306

Catalog Number: FAB6335G

100 µg

## DESCRIPTION

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| **Species Reactivity** | Human |
| **Specificity** | Detects human Heparan Sulfate 2-O-Sulfotransferase 1/HS2ST1 in ELISAs and Western blots. |
| **Source** | Monoclonal Mouse $IgG_1$ Clone # 738306 |
| **Purification** | Protein A or G purified from hybridoma culture supernatant |
| **Immunogen** | Chinese hamster ovary cell line CHO-derived recombinant human Heparan Sulfate 2-O-Sulfotransferase 1/HS2ST1<br>Met59-Asn356<br>Accession # Q7LGA3 |
| **Conjugate** | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm |
| **Formulation** | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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.*

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| **Western Blot** | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

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| **Shipping** | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage** | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied |

## BACKGROUND

Heparan sulfate is a highly sulfated polysaccharide found on the cell surface and within the extracellular matrix. Typically, it is covalently attached to the protein core of proteoglycans, such as syndecans and glypicans. Heparin, on the other hand, can be considered as a highly sulfated version of heparan sulfate that is predominantly found in mast cells. Both heparin and heparan sulfate contain disaccharide repeats of uronic acid and N-acetylglucosamine and are modified by the same sulfotransferases (1, 2). The uronic acid residues are either glucuronic acid or iduronic acid and maybe sulfated at the 2-O position by heparan sulfate 2-O sulfotransferase 1 (HS2ST1) (3, 4). HS2ST1 physically interacts in the Golgi apparatus with glucuronyl c5-epimerase (5), which catalyzes the conversion of glucuronic acid to iduronic acid (6). As a consequence, 2-O sulfation predominantly occurs on iduronic acids naturally and overexpression of HS2ST1 alone causes an increase in 2-O sulfation on glucuronic acid (7).

## PRODUCT SPECIFIC NOTICES

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