

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Sulfamidase/SGSH in direct ELISAs.                                                                                                                                                                                                                            |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 1018387                                                                                                                                                                                                                          |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>Spodoptera frugiperda</i> , Sf 21 (baculovirus)-derived human Sulfamidase/SGSH protein<br>Arg23-Leu502<br>Accession # P51688                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | 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.

**Immunocytochemistry** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

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

#### BACKGROUND

Also known as N-sulfoglucosamine sulfohydrolase and heparan N-sulfatase, Sulfamidase/SGSH is an important member of the sulfatase family involved in the degradation of heparan sulfate (HS) (1). Different from the HS specific endosulfatases that remove sulfate from internal GlcNAc residues (2), SGSH removes sulfate group from the non-reducing end glucosamine residues on HS. The SGSH deficiency results in mucopolysaccharidosis type IIIA (MPS IIIA, Sanfilippo A syndrome), an autosomal recessive lysosomal storage disease characterized by neurological dysfunction but relatively mild somatic manifestations (3). Human SGSH shows 88.6% sequence identity with that of mouse sequence.

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