

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Serpin E2/PN1 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) Serpin A1, A3, A4, A5, A12, B6, B8, B9, C1, D1, F2, I1, recombinant mouse Serpin E2, or rhPEDF is observed.                               |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 449888                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Serpin E2/PN1<br>Met1-Pro397<br>Accession # NP_001130000                                                                                                                                                              |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 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.

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

#### PREPARATION AND STORAGE

**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

Serpin E2, also known as protease nexin I or glial-derived nexin (GDN), is a member of the Serpin superfamily of the serine protease inhibitors (1). Serpin E2 is a potent inhibitor of thrombin, plasmin and plasminogen activators (2). It is differentially expressed during neuronal differentiation and is able to transform human embryonic kidney cells into neuron-like cells (3). Its over-expression in mice leads to progressive neuronal and motor dysfunction in these animals (4). It is also over-expressed in the majority of pancreatic carcinoma as well as gastric and colorectal cancer samples whereas it is weakly expressed in all normal pancreas and chronic pancreatitis tissue samples (5). It plays an important role in controlling male fertility because its knockout male mice show a marked impairment in fertility from the onset of sexual maturity and its abnormal expression is found in the semen of men with seminal dysfunction (6). The deduced amino acid sequence of rhSerpin E2 is the same as that in NP\_001130000, which predicts Arg329 in its 397 amino acid residues (7). An alternatively splice form predicts Thr-Gly at positions 329 and 330 in its 398 amino acid sequence (8-10).

#### PRODUCT SPECIFIC NOTICES

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