

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human ADP-Sugar Pyrophosphatase/NUDT5 in direct ELISAs.                                                                                                                                                                                                             |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 739044                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human ADP-Sugar Pyrophosphatase/NUDT5<br>Glu2-Phe219<br>Accession # Q9UUK9                                                                                                                                                              |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 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

ADP-Sugar Pyrophosphatase (NUDT5) is a member of the nudix superfamily of enzymes. Members of this family are pyrophosphohydrolases that act upon substrates with the general structure of a nucleoside (Nu) diphosphate (di) linked to another moiety, X (NDP-X) to yield NMP plus P-X (1). Human NUDT5 is a homodimeric enzyme present in the cytosol of most cell types (2). Glu166 and three magnesium ions are important for stabilizing the transition state during the hydrolysis of ADPR (3). NUDT5 has been suggested to play a role in regulating the intracellular levels of ADPR by NO activation through ADP-ribosylation at cysteine residues of the enzyme in macrophages (4). It also may play defensive role against the mutagenesis induced by oxidized deoxyribonucleosides (5, 6).

#### PRODUCT SPECIFIC NOTICES

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