

#### DESCRIPTION

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|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human ENPP-2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) ENPP-5 and rhENPP-7 is observed.                                                                                                       |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human ENPP-2/Autotaxin<br>Asp49-Ile863<br>Accession # Q13822                                                                                                                                                                |
| <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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</b> | 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

ENPP-2, also known as Autotaxin, belongs to the ectonucleotide pyrophosphatase/phosphodiesterase (NPP) family. Some NPPs hydrolyze phosphates from nucleotides and their derivatives. ENPP-2 shares 40-50% identity to ENPP1 & 3, all of which contain a N-terminal intracellular domain, a single transmembrane domain and a large extracellular domain that includes a catalytic domain, two somatomedin-B-like domains, and a C-terminal nuclease-like domain (1). Unlike ENPP-1 and ENPP-3, ENPP-2 has weak activity against nucleotides, but exhibits a lysophospholipase D activity which allows the formation of lysophosphatidic acid (LPA) and choline from lysophosphatidylcholine (2). The hydrolysis of nucleotides and lysophospholipids by ENPP-2 is mediated by a single catalytic site (2). Evidence shows LPA and sphingosine 1-phosphate to be specific inhibitors of ENPP-2 (3). ENPP-2 was originally found to stimulate tumor cell motility and has since been found to enhance tumor invasion and metastasis (4) and to be up-regulated in several types of carcinomas including breast and lung (5).

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