

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ENPP-1 in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human ENPP-2 and recombinant mouse ENPP-2 is observed after removal of cross-reactivity with human ENPP-2.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ENPP-2-1-2 Asp49-Trp144 (ENPP-2), Val191-Leu591 (ENPP-1), Asn532-Ile863 (ENPP-2). Cross-reactivity with human ENPP-2 was removed from the final product. Accession # Q13822 (ENPP-2) P22413 (ENPP-1)
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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

Ectonucleotide pyrophosphatase/phosphodiesterase 1 (ENPP-1) is a transmembrane glycoprotein that hydrolyzes nucleotides and nucleotide derivatives with the formation of nucleotide-5'-monophosphates. It is inserted into the plasma membrane by an N-terminal transmembrane domain. Human ENPP-1 has a small N-terminal cytoplasmic domain and a large C-terminal region containing two somatomedin B-like domains, a catalytic domain and a nuclease-like domain in the extracellular space (1). Defects in the ENPP-1 gene cause arterial calcification and bone mineralization abnormalities (2). ENPP-1 polymorphism or overexpression is also associated with obesity, type II diabetes and insulin resistance, which makes modulation of ENPP-1 activity one of the targets to treat insulin resistance and related diseases (1).

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