

## DESCRIPTION

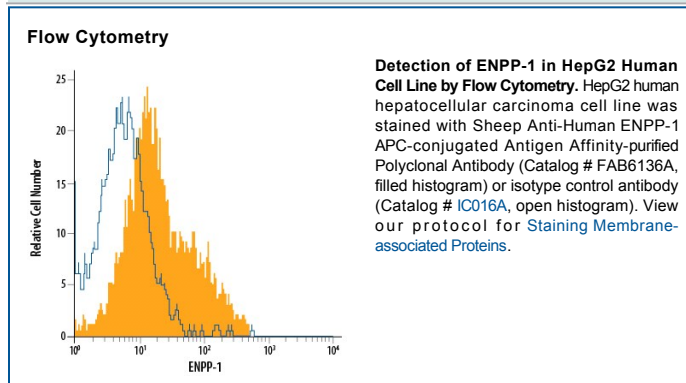
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ENPP-1 in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant human ENPP-2 and recombinant mouse ENPP-2 is observed after removal of cross-reactivity with human ENPP-2.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	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)
<b>Conjugate</b>	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *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>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## 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>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## 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).

### References:

1. Goldfine, I.D. *et al.* (2010) *Endocrine Reviews*. **29**:62.
2. Hesse, L. *et al.* (2002) *Proc. Natl. Acad. Sci.* **99**:9445.