

## DESCRIPTION

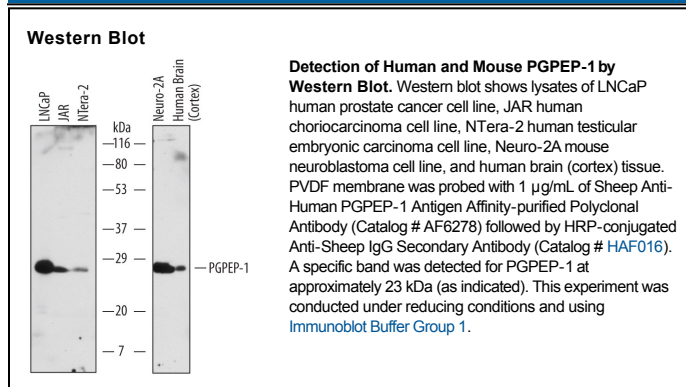
<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human PGPEP-1 in direct ELISAs and, human and mouse PGPEP-1 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PGPEP-1 Met1-His209 Accession # Q9NXJ5
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Pyroglutamyl peptidase-1 (PGPEP-1) is an omega peptidase which removes pyroglutamyl residues from the amino termini of peptides and proteins (1). It is a cytosolic cysteine peptidase that is expressed in most cell types (2). The enzyme requires a thiol-reducing agent for activity (3). PGPEP-1 is potentially involved in the inactivation of biologically active peptides that possess an amino terminal pyroglutamyl group (3). Examples of such peptides include neurotensin, luteinizing hormone releasing hormone, and thyrotropin-releasing hormone. Human and mouse PGPEP-1 share 95% aa sequence identity.

### References:

1. Kilbane Z. *et al.* (2007) *Mol. Cell. Biochem.* **297**:189.
2. Cummins P.M. and B. O'Connor (1998) *Biochim. Biophys. Acta.* **1429**:1.
3. Dando P.M. *et al.* (2003) *Protein Express. Purif.* **28**:111.