

DESCRIPTION

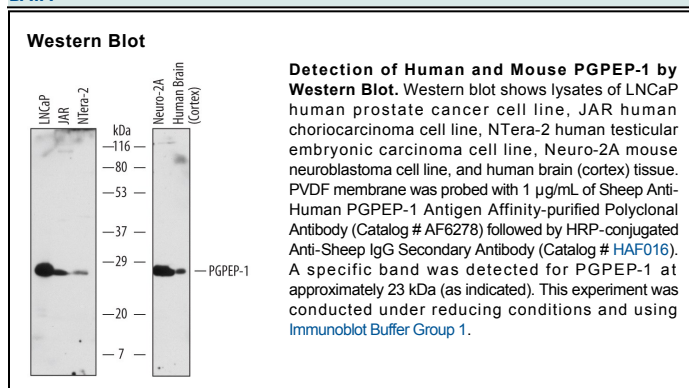
Species Reactivity	Human/Mouse
Specificity	Detects human PGPEP-1 in direct ELISAs and, human and mouse PGPEP-1 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PGPEP-1 Met1-His209 Accession # Q9NXJ5
Formulation	Lyophilized 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
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.