

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Peptidase Inhibitor 16/PI16 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human PI16 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Peptidase Inhibitor 16/PI16 Leu21-Glu455 Accession # Q9ET66
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	0.1 µg/mL	Recombinant Mouse Peptidase Inhibitor 16/PI16

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

PI16 (Peptidase Inhibitor 16) is a variable molecular weight (MW) member of the CRISP family of proteins. It is expressed by cardiomyocytes and serves as an autocrine negative growth regulator. Mature mouse PI16 is a type I transmembrane protein 469 amino acids (aa) in length. The extracellular region includes all but the C-terminal 21 amino acids. A soluble form of PI16 is known. Although its predicted MW is 50 kDa, it runs anomalously at 70 kDa (unmodified) in SDS-PAGE. With glycosylation, it appears to be 100-110 kDa in size. Three potential variants exist. One shows a deletion of aa 51-124, a second shows a 9 aa extension at the N-terminus, and a third shows a deletion of aa 191-452. Over aa 1-464, mouse PI16 shares 86% and 61% aa identity with rat and human PI16, respectively.