

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Neprilysin-2/MMEL1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Neprilysin, rhECE-1 or rhECE-2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 353207
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Neprilysin-2 Gly78-Trp779 Accession # Q495T6
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 either lyophilized or 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	Recombinant Human Neprilysin-2/MMEL1 (Catalog # 2340-ZN)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Neprilysin-2/MMEL1 (Catalog # 2340-ZN), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

Neprilysin-2 is a zinc protease of the neprilysin (NEP) family, which also includes NEP, ECE-2, PEX, DINE, Kell and several NEP-like proteins (1). It is encoded by the MMEL1 gene in the human genome and is also known as soluble secreted endopeptidase (SEP), Neprilysin-like 1 and Neprilysin-2 (2). Highly expressed in testis, the cDNA predicted a type II transmembrane protein with a short cytoplasmic tail and a large ectodomain. Both membrane-bound and soluble forms were comparable with regard to model substrates, pH optima and inhibitor profiles.

References:

1. Turner, A.J. *et al.* (2001) *BioEssays* **23**:261.
2. Carpentier, M. *et al.* (2004) in *Handbook of Proteolytic Enzymes*. Barrett, A.J. *et al.* eds. p. 426.