

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kallikrein 12 in direct ELISAs and Western blots. Does not cross-react with recombinant human (rh) Kallikrein 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, rhKallikrein β1, rhHGFA, rhFactor VII, rhFactor X, rhFactor XI, rhThrombin, or rhuPA-1.
Source	Monoclonal Mouse IgG _{2B} Clone # 364926
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Kallikrein 12 Ala18-Asn248 Accession # Q9UKR0
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 Kallikrein 12 (Catalog # 3095-SE)

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

Human tissue Kallikrein 12, encoded by the KLK12 gene, is a secreted serine protease that belongs to the human tissue kallikrein family (1). It is present in many tissues, such as salivary gland, stomach and breast. KLK12 displays trypsin-like enzymatic activity. This activity can be inhibited by Serpin F2 (R&D Systems, Catalog # 1470-PI). The physiological functions of KLK12 still remain unclear. Its expression is modulated by steroid hormones and is down-regulated in breast cancer (2). Human KLK12 has three splice variants resulting from alternative splicing of the 3' end. The amino acid sequence of human KLK12 is 80%, 77%, 71% and 66% to that of bovine, canine, mouse, and rat.

References:

1. Yousef, G.M. *et al.* (2000) *Genomics*. **69**:331.
2. Yousef, G.M. and E.P. Diamandis (2001) *Endocrine Rev.* **22**:184.