

## DESCRIPTION

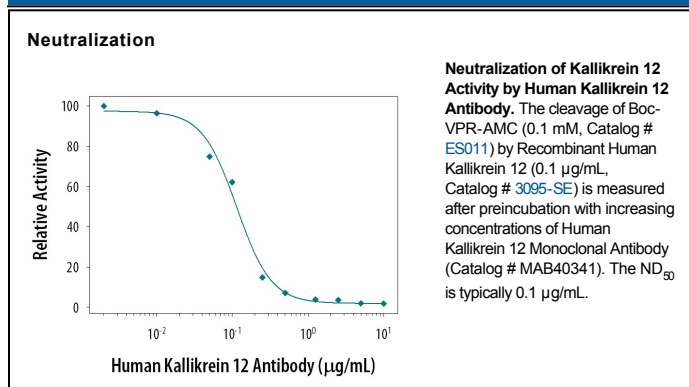
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Kallikrein 12 in direct ELISAs and Western blots. No cross-reactivity with recombinant human (rh) Kallikrein 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, rhKallikrein β1, rhHGF Activator, rhFactor VII, rhFactor X, rhFactor XI, rhThrombin or rhuPA-1 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 364932
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Kallikrein 12 Ala18-Asn248 Accession # Q9UKR0
<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	Recombinant Human Kallikrein 12 (Catalog # 3095-SE) under non-reducing conditions only
<b>Immunoprecipitation</b>	25 μg/mL	Conditioned cell culture medium spiked with Recombinant Human Kallikrein 12 (Catalog # 3095-SE), see our available <a href="#">Western blot detection antibodies</a>
<b>Neutralization</b>		Measured by its ability to neutralize Recombinant Human Kallikrein 12 (0.1 μg/mL, Catalog # 3095-SE) cleavage of the fluorogenic peptide substrate Boc-VPR-AMC (0.1 mM, Catalog # ES011). The Neutralization Dose (ND <sub>50</sub> ) is typically 0.1 μg/mL.

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

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.