

## DESCRIPTION

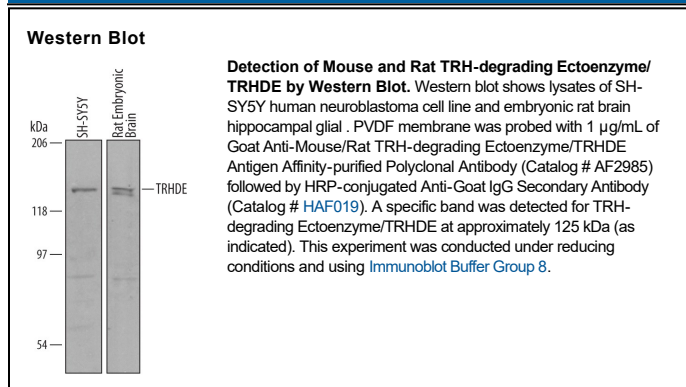
<b>Species Reactivity</b>	Mouse/Rat
<b>Specificity</b>	Detects mouse and rat TRH-degrading Ectoenzyme/TRHDE in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse TRH-degrading Ectoenzyme/TRHDE Arg64-His1025 Accession # Q8K093
<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 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
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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

TRHDE, also known as pyroglutamyl peptidase II and thyroliberinase, is a metalloprotease that specifically removes pyroglutamate from thyrotropin-releasing hormone, a tripeptide of L-pyroglutamyl-L-histidyl-L-prolineamide. TRH functions as a hypothalamic hypophysiotropic neuropeptide and neurotransmitter/neuromodulator within the central nervous system (1). Inhibitors of TRHDE have potential applications as research and therapeutic agents because TRHDE inactivates TRH (2). TRHDE is a type II transmembrane protein and a soluble form is also present in the serum (1). The recombinant mouse TRHDE corresponds to the ectodomain of the enzyme. Its amino acid sequence is 97% and 95% identical to that of rat and human.

## References:

1. Schmitmeier, S. *et al.* (2002) *Eur. J. Biochem.* **269**:1278.
2. Kelly, J.A. *et al.* (2005) *Biochem. J.* **389**:569.