

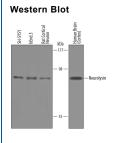
## **Human/Mouse/Rat Neurolysin Antibody**

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF3814

DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Neurolysin Neurolysin in Western blots and human Neurolysin in direct ELISAs. In direct ELISAs, less than $5\%$ cross-reactivity with recombinant human (rh) Meprin $\alpha$ , rhMeprin $\beta$ subunit, and rhTHOP1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant human Neurolysin aa 38-704
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 det	ermined by each laboratory for each applica	ation. General Protocols are available in the Technical Information section on our website.
	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below
Immunoprecipitation	25 μg/mL	Conditioned cell culture medium spiked with Recombinant Human Neurolysin (Catalog # 3814-ZN), see our available Western blot detection antibodies

## DATA



Detection of Human, Mouse, and Rat Neurolysin by Western Blot. Western blot shows lysates of SH-SYSY human neuroblastoma cell line, bEnd.3 mouse endothelioma cell line, rat cortical neuron tissue, and human brain (cortex) tissue. PVDF Membrane was probed with 1  $\mu$ g/mL of Sheep Anti-Human/Mouse/Rat Neurolysin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3814) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Neurolysin at approximately 80 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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.  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

Neurolysin, also known as Oligopeptidase M (mitochondrial peptidase), soluble angiotensin II-binding protein and endopeptidase EC 3.4.24.16 (1, 2), is a homologue of Thimet Ologopeptidase (THOP1), a zinc peptidase of the M3 family that also includes mitochondrial intermediate peptidase. Neurolysin expresses in two forms with the difference of an N-terminal transit peptide that targets the localization to mitochondria (1). The shorter form exists in cytosol. The recombinant human Neurolysin is expressed without the transit peptide and is isolated from the cytosol. Like THOP1, Neurolysin is capable of cleaving a number of vasoactive peptides such as bradykinin and neurotensin (3). All known substrates of THOP1 and Neurolysin contain 17 or fewer amino acids.

## References:

- 1. Serizawa, A. et al. (1995) J. Biol. Chem. 270:2092.
- 2. Barett, A.J. and J.M. Chen (2004) in Handbook of Proteolytic Enzymes (ed. Barrett, A.J. et al.) pp. 356, Elsevier Academic Press, San Diego.
- 3. Norman, M.U. et al. (2003) Am. J. Physiol. Heart Circ. Physiol. 284:H1978.

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