

DESCRIPTION

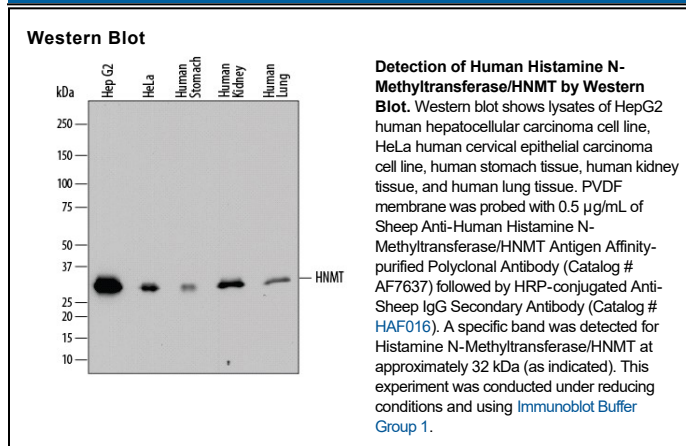
Species Reactivity	Human
Specificity	Detects human Histamine N-Methyltransferase/HNMT in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Histamine N-Methyltransferase/HNMT Ser7-Ala292 Accession # P50135
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	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

HNMT (Histamine N-Methyltransferase/HMT) is a 32-34 kDa monomeric member of the HNMT family, methyltransferase superfamily of enzymes. It is found in the cytosol of a variety of cell types including visceral smooth muscle cells, bronchial epithelium, erythrocytes and neurons of the central and peripheral nervous system. HNMT is one of two histamine-processing enzymes in mammals. Following transport of histamine into the cell, HNMT catalyzes the addition of adenosyl-L-Met to histamine, generating N-methylhistamine. Human HNMT is 292 amino acids (aa) in length. It contains one methyl transferase domain (aa 32-216) and three potential Ser phosphorylation sites. The HNMT gene is polymorphic, with single aa changes known to impact activity. There are also two splice variants. One shows a five aa substitution for aa 47-292, while another contains a 63 aa substitution for aa 64-292. The latter isoform is reported to possess a GPI-linkage but show no activity on histamine. Over aa 2-292, human HNMT shares 83% aa sequence identity with mouse HNMT.