

# Human Histamine N-Methyltransferase/HNMT Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7637

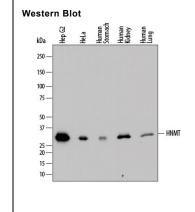
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Histamine N-Methyltransferase/HNMT in direct ELISAs and Western blots.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	unogen E. coli-derived recombinant human Histamine N-Methyltransferase/HNMT Ser7-Ala292 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



### Detection of Human Histamine N-Methyltransferase/HNMT by Western

Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, HeLa human cervical epithelial carcinoma cell line, human stomach tissue, human kidney tissue, and human lung tissue. PVDF membrane was probed with 0.5 µg/mL of Sheep Anti-Human Histamine N-Methyltransferase/HNMT Antigen Affinitypurified Polyclonal Antibody (Catalog # AF7637) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Histamine N-Methyltransferase/HNMT at approximately 32 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

# 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

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- 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.

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