

Basic Information

Product Name	Anti-Mast Cell Chymase/CMA1 Antibody	
Gene Name	CMA1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	IHC, WB	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CMA1 recombinant protein (Position: I22-N247). Human CMA1 shares 75% and 74% amino acid (aa) sequence identity with mouse and rat CMA1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	27-35 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

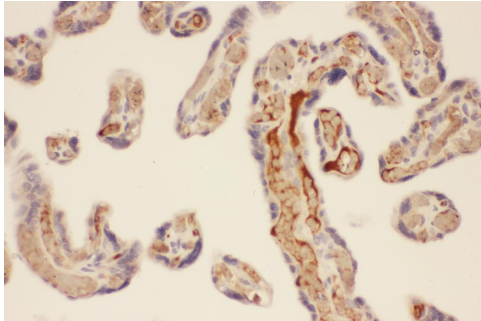
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

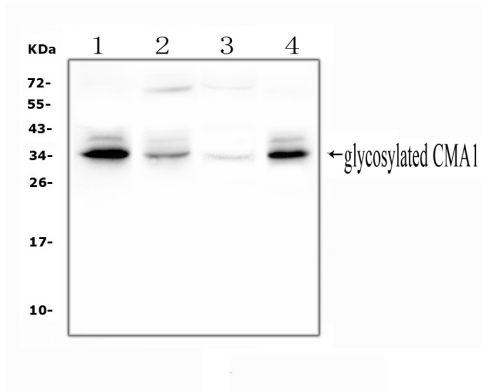
Chymase is a major secreted protease of mast cells with suspected roles in vasoactive peptide generation, extracellular matrix degradation, and regulation of gland secretion. This gene product is a chymotryptic serine proteinase that belongs to the peptidase family S1. Chymase is mapped to 14q12. It is expressed in mast cells and thought to function in the degradation of the extracellular matrix, the regulation of submucosal gland secretion, and the generation of vasoactive peptides. In the heart and blood vessels, this protein, rather than angiotensin converting enzyme, is largely responsible for converting angiotensin I to the vasoactive peptide angiotensin II.

Selected Validation Data



IHC analysis of Mast Cell Chymase/CMA1 using anti-Mast Cell Chymase/CMA1 antibody (PB9055).

Mast Cell Chymase/CMA1 was detected in a paraffin-embedded section of human placenta tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Mast Cell Chymase/CMA1 Antibody (PB9055) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Western blot analysis of Mast Cell Chymase/CMA1 using anti-Mast Cell Chymase/CMA1 antibody (PB9055). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human PC-3 whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: rat liver tissue lysates,

Lane 4: mouse HEPA1-6 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Mast Cell Chymase/CMA1 antigen affinity purified polyclonal antibody (PB9055) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Mast Cell Chymase/CMA1 at approximately 27-35 kDa. The expected band size for Mast Cell Chymase/CMA1 is at 27 kDa.