

Basic Information

Product Name	Anti-CD10/MME Antibody (Clone#AFGB-13)
Gene Name	MME
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human, rat
Tested Application	WB, IHC, IP
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
Immunogen	A synthesized peptide derived from human CD10 CD10 is a transmembrane type II molecule and functions as a metallo-peptidase requiring zinc. Specifically, CD10 cleaves 1-3 amino-terminal amino acids from peptides with a preference for neutral amino acids (valine, iso-leucine, phenylalanine, leucine or alanine) . Involved in the degradation of atrial natriuretic factor (ANF) .
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	100 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200 ImmunoPrecipitation (IP): 1:50

Storage

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

Background Information

CD10, also known as membrane metallo-endopeptidase, neutral endopeptidase (NEP), Neprilysin, or common acute lymphoblastic leukemia antigen (CALLA), is a zinc-dependent metalloprotease enzyme that degrades a number of small secreted peptides, most notably the amyloid beta peptide whose abnormal misfolding and aggregation in neural tissue has been implicated as a cause of Alzheimer's disease. This gene is localized to human chromosome 3 by study of somatic cell hybrids and regionalized the location to 3q21-q27 by in situ hybridization. By cDNA transfection analysis,

CD10 is confirmed as a functional neutral endopeptidase of the type that has previously been called enkephalinase. CD10 has also been called atriopeptidase. Atriopeptidase specifically degrades atrial natriuretic factor. A specific enzyme inhibitor was developed and reported that it had effects similar to those of low-dose ANF infusion. These effects include diuresis, natriuresis, vasodilatation, and suppression of the renin-angiotensin-aldosterone system.

Selected Validation Data

Western blot analysis of CD10 expression in Ramos cell lysate.

