

## Datasheet for ABIN360952

# anti-XPNPEP1 antibody



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Quantity:	0.1 mg
Target:	XPNPEP1
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This XPNPEP1 antibody is un-conjugated
Application:	Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

#### **Product Details**

Immunogen:	BALB/c mice using a membrane protein fraction of isolated rat glomeruli
Clone:	JG12C9C10
Isotype:	lgG1
Specificity:	This antibody reacts to Aminopeptidase P.
Purification:	Protein G chromatography

#### **Target Details**

Target:	XPNPEP1
Alternative Name:	XPNPEP1 (XPNPEP1 Products)
Background:	Aminopeptidase P (AP-P, X-Pro aminopeptidase) has the unique ability to leave the N-terminal

amino acid residue from peptides having proline as the penultimate amino acid residue. Biologically active peptides comprise an important and diverse class of extracellular chemical messengers that mediate a wide range of intercellular interactions. Several bioactive peptides including hormones, neuropeptides, neurotransmitters escape non-specific protease degradation by having an Xaa-Pro motif at their amino termini. Due to its cyclic nature, proline confers resistance to such peptide bonds so that aminopeptidases with broad specificity cannot act upon such peptides. There are a limited number of peptidases that act on peptide bonds involving a proline residue, such as dipeptidyl peptidase II (DPPII) and dipeptidyl peptidase W (DPPIV), and prolidase (which cleaves the Xaa-Pro bond only in dipeptides), or endopeptidases such as prolyl endopeptidase (which cleaves on the carbonyl side of proline residues within a protein or peptide). However, none of these enzymes have been reported to hydrolyze Xaa-Pro bonds located at the N-terminus of peptides and proteins. Therefore, role of AP-P is crucial in this respect. AP-P activity is ubiquitous and has been found in a wide range of organisms including bacteria, yeast and vertebrates. Mammalian AP-Ps exist in membranebound and cytosolic forms, which represent two distinct gene products. The cytosolic (soluble) form of aminopeptidase P is found in human leukocytes and rat brain. Synonyms: Aminoacylproline aminopeptidase, Cytosolic aminopeptidase P, Soluble aminopeptidase P, X-Pro aminopeptidase 1, X-prolyl aminopeptidase 1 soluble, XPNPEPL, XPNPEPL1, Xaa-Pro aminopeptidase 1

Gene ID:	7511
NCBI Accession:	NP_065116
UniProt:	Q9NQW7

Application Details	
Application Notes:	Immunohistochemistry on frozen and paraffin sections.  Other applications not tested.  Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only
Handling	
Reconstitution:	Restore in sterile water to a concentration of 0.1-1.0 mg/mL. Centrifuge vial prior to opening.
Buffer:	PBS pH 6,0
Precaution of Use:	Use of sodium azide as a preservative will substantially inhibit the enzyme activity of

### Handling

	horseradish peroxidase.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for longer.