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# MMP-14 Rabbit pAb

CatalogNo: YT2910 Orthogonal Validated 💽

# **Key Features**

Host Species • Rabbit	Reactivity • Human,Mouse,Rat	<ul><li>Applications</li><li>WB,IHC,IF,ELISA</li></ul>
MW • 65kD (Observed)	Isotype • IgG	

### **Recommended Dilution Ratios**

WB 1:500-1:2000 IHC 1:100-1:300 ELISA 1:10000 IF 1:50-200

## **Storage**

Storage\*-15°C to -25°C/1 year(Do not lower than -25°C)FormulationLiquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## **Basic Information**

Clonality Polyclonal

# Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human MMP-14. AA range:471-520
Specificity	MMP-14 Polyclonal Antibody detects endogenous levels of MMP-14 protein.

#### Gene name MMP14

#### Protein Name

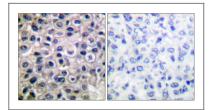
Matrix metalloproteinase-14				
Organism	Gene ID	UniProt ID		
Human	<u>4323;</u>	<u>P50281;</u>		
Mouse	<u>17387;</u>	<u>P53690;</u>		
Rat	<u>81707;</u>	<u>Q10739;</u>		

# CellularMembrane ; Single-pass type I membrane protein . Melanosome. Cytoplasm. Identified by<br/>mass spectrometry in melanosome fractions from stage I to stage IV. Forms a complex with<br/>BST2 and localizes to the cytoplasm.

**Tissue specificity** Expressed in stromal cells of colon, breast, and head and neck. Expressed in lung tumors.

Function Catalytic activity:Endopeptidase activity. Activates progelatinase A by cleavage of the propeptide at 37-Asn-|-Leu-38. Other bonds hydrolyzed include 35-Gly-|-Ile-36 in the propeptide of collagenase 3, and 341-Asn-|-Phe-342, 441-Asp-|-Leu-442 and 354-Gln-|-Thr-355 in the aggrecan interglobular domain.,cofactor:Binds 1 zinc ion per subunit.,cofactor:Calcium.,Domain:The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the enzyme.,Function:Seems to specifically activate progelatinase A. May thus trigger invasion by tumor cells by activating progelatinase A on the tumor cell surface.,PTM:The precursor is cleaved by a furin endopeptidase.,similarity:Belongs to the peptidase M10A family.,similarity:Contains 4 hemopexin-like domains.,subcellular location:Identified by mass spectrometry in melanosome fractions from stage I to stage IV.,tissue specificity:In stromal cells of colon, breast, and head and neck.,

## Validation Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using MMP-14 Antibody. The picture on the right is blocked with the synthesized peptide.

	117
MMP-14	85
	48
	34
	26
	19 (kD)

Western blot analysis of lysates from NIH/3T3 cells, using MMP-14 Antibody. The lane on the right is blocked with the synthesized peptide.

# **Contact information**

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information: MMP-14 Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents