

## Product datasheet for **TP720324M**

### **MMP2 (NM\_001127891) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase) (MMP2), transcript variant 2
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293
<b>Expression cDNA Clone or AA Sequence:</b>	Ala30-Cys660
<b>Tag:</b>	C-His
<b>Predicted MW:</b>	72.0 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
<b>Endotoxin:</b>	< 0.1 EU per µg protein as determined by LAL test
<b>Reconstitution Method:</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the lyophilized protein in ddH <sub>2</sub> O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for at least 6 months from date of receipt under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_001121363</a>
<b>Locus ID:</b>	4313
<b>UniProt ID:</b>	<a href="#">P08253</a>
<b>Cytogenetics:</b>	16q12.2
<b>Synonyms:</b>	CLG4; CLG4A; MMP-2; MMP-II; MONA; TBE-1



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**Summary:**

This gene is a member of the matrix metalloproteinase (MMP) gene family, that are zinc-dependent enzymes capable of cleaving components of the extracellular matrix and molecules involved in signal transduction. The protein encoded by this gene is a gelatinase A, type IV collagenase, that contains three fibronectin type II repeats in its catalytic site that allow binding of denatured type IV and V collagen and elastin. Unlike most MMP family members, activation of this protein can occur on the cell membrane. This enzyme can be activated extracellularly by proteases, or, intracellularly by its S-glutathiolation with no requirement for proteolytical removal of the pro-domain. This protein is thought to be involved in multiple pathways including roles in the nervous system, endometrial menstrual breakdown, regulation of vascularization, and metastasis. Mutations in this gene have been associated with Winchester syndrome and Nodulosis-Arthropathy-Osteolysis (NAO) syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2014]

**Protein Families:**

Druggable Genome, Protease

**Protein Pathways:**

Bladder cancer, GnRH signaling pathway, Leukocyte transendothelial migration, Pathways in cancer

**Product images:**