

## Product datasheet for PH300720

### MMP2 (NM\_004530) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	MMP2 MS Standard C13 and N15-labeled recombinant protein (NP_004521)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC200720
Predicted MW:	73.88 kDa
Protein Sequence:	>RC200720 representing NM_004530 Red=Cloning site Green=Tags(s)

MEALMARGALTGPLRALCLLGCLLSHAAAAPSPIIKFPGDVAPKTDKELAVQYLNTFYGCPKESCNLFVL  
KDTLKKMQKFFGLPQTGDLDQNTIETMRKPRCGNPDVANYNFFPRKPKWDKNQITYRIIGYTPDLDPETV  
DDAFARAFQVWSDVTPLRFSRIHDGEADIMINFRWEHGDGYPFDGKDGLLAHAFAPGTGVGGDSHFDDDD  
ELWTLGEGQVVRVKYGNADGEYCKFPFLFNGKEYNSCTDTGRSDGFLWCSTTYNFEKDGKYGFCPHEALF  
TMGGNAEQPCKFPFRFQGTSYDSCTTEGRTDGYRWCCTEDYDRDKKYGFCPETAMSTVGGNSEGAPCV  
FPFTFLGNKYESCTSAGRS DGKMWCAATTANYDDDRKWFCDQGYSLFLVAAHEFGHAMGLEHSQDPGAL  
MAPIYTYTKNFRLSQDDIKGIQELYGASPDIDLGTGPTPTLGPVTPEICKQDIVDGI AQIRGEIFFFKD  
RFIWRVTPRDKPMGPLL VATFWPELPEKIDAVYEAPQEEKAVFFAGNEYWIYSASTLERGYPKPLTSLG  
LPPDVQRVDAAFNWSKNKTYIFAGDKFWRYNEVKKKMDPGFKLIADAWNAIPDNLDAVVDLQGGGHSY  
FFKGAYYLKLENQSLKSVKFGSIKSDWLGC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_004521</a>
RefSeq Size:	3069



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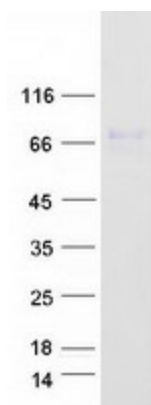
RefSeq ORF:	1980
Synonyms:	CLG4; CLG4A; MMP-2; MMP-II; MONA; TBE-1
Locus ID:	4313
UniProt ID:	<a href="#">P08253</a> , <a href="#">A0A024R6R4</a>
Cytogenetics:	16q12.2

**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:



Coomassie blue staining of purified MMP2 protein (Cat# [TP300720]). The protein was produced from HEK293T cells transfected with MMP2 cDNA clone (Cat# [RC200720]) using MegaTran 2.0 (Cat# [TT210002]).