

## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

## Product name MMP1, Human, clone 3B6

Catalog number	HM2397-100UG		
Lot number	-	Expiry date	-
Volume	1 ml	Amount	100 µg
Formulation	0.2 $\mu m$ filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 μg/ml
Host Species	Mouse IgG1	Conjugate	None
Endotoxin	N.A.	Purification	Protein G
Storage	4°C		

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•	•	•				•	•
No								
N.D.				•	•	٠		

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

• W: Western blot can be performed under reduced or non-reduced conditions. The expected band size is 37 kDa.

## **General Information**

Description	Monoclonal antibody clone 3B6 recognizes human matrix metalloproteinase 1 (MMP1). MMPs are a large class of zinc dependent catalytic enzymes. They cleave or degrade virtually all components of the extracellular matrix. MMPs are involved in a wide range of processes like tissue remodeling, wound healing, angiogenesis and regulation of inflammatory processes. They are also involved in pathological processes such as rheumatoid arthritis, inflammation, atherosclerosis, tumor growth and metastasis. MMPs are formed as inactive zymogens which must be cleaved to become active. Activated MMPs are inhibited by TIMPs. TIMP and MMP expression and function are tightly regulated in order to contain a balance in proteolysis and proteolysis inhibition. MMP1 or interstitial collagenase is the major type of proteolytic enzyme and can degrade interstitial collagen types I, II, and III, clearing a path for cells to invade matrix barriers and migrate through tissue stroma. The MMP1 gene is located in 11q22 and is translated in a wide variety of cells, such as fibroblasts, macrophages, endothelial and epithelial cells. Genetic polymorphisms and related gene expression in MMP1 may have a pathogenic role. Under normal physiologic conditions levels of MMP1 are low, but in pathological conditions, such as inflammation, there may be dysregulation of MMP1 because the expression of MMP1 is potently up-regulated by cytokines and growth factors.			
Immunogen	A synthetic peptide corresponding to C-terminus of human MMP1. (Ovalbumin-conjugated synthetic peptide CSSFGFPRTVKH)	;		
Aliases	Interstitial collagenase, Fibroblast collagenase, Matrix metalloproteinase-1			
Gene	Gene name: MMP1 Entrez ID: <u>4312</u> Uniprot: <u>P03956</u>			
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.			
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.			

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Brenda Teunissen	21/07/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.