

For Research Use Only

MGP Monoclonal antibody

Catalog Number: 60055-1-Ig

Featured Product

6 Publications



Basic Information

Catalog Number:

60055-1-Ig

Size:

150ul, Concentration: 2000 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG2a

Immunogen Catalog Number:

AG1091

GenBank Accession Number:

BC005272

GeneID (NCBI):

4256

UNIPROT ID:

P08493

Full Name:

matrix Gla protein

Calculated MW:

103 aa, 13 kDa

Observed MW:

12 kDa

Purification Method:

Protein A purification

CloneNo.:

1A1C3

Recommended Dilutions:

WB: 1:2000-1:10000

IHC: 1:400-1:1600

IF-P: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: human placenta tissue, human brain tissue, human kidney tissue, human liver cancer tissue, human saliva

IHC: human gliomas tissue, human brain tissue, human lung tissue, human heart tissue, human kidney tissue, human colon cancer tissue

IF-P: mouse kidney tissue,

Background Information

Matrix Gla protein (MGP) is a vitamin K-dependent, extracellular matrix protein. MGP plays a pivotal role in preventing soft tissue calcification and local mineralization of the vascular wall. Vitamin K deficiency leads to inactive uncarboxylated MGP (ucMGP), which accumulates at sites of arterial calcification. However MGP is synthesized in many tissues and is especially enriched in embryonic tissues and in cancer cells. Defects in MGP are the cause of Keutel syndrome (KS), which is an autosomal recessive disorder characterized by abnormal cartilage calcification, peripheral pulmonary stenosis neural hearing loss and midfacial hypoplasia.

Notable Publications

Author	Pubmed ID	Journal	Application
Zhenjun Xu	34795497	J Inflamm Res	WB
Junjie Wu	39980193	Mol Ther	IHC
Jinghua Fang	39462005	Nat Commun	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

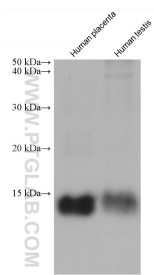
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

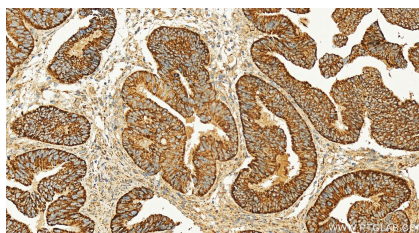
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

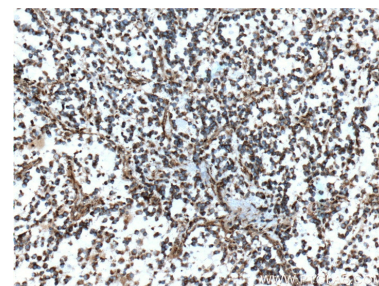
Selected Validation Data



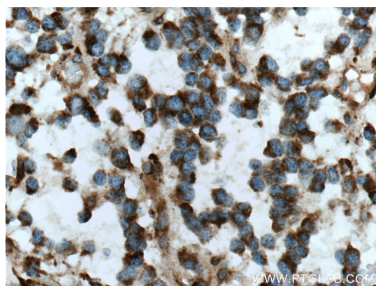
Various lysates were subjected to SDS PAGE followed by western blot with 60055-1-Ig (MGP antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



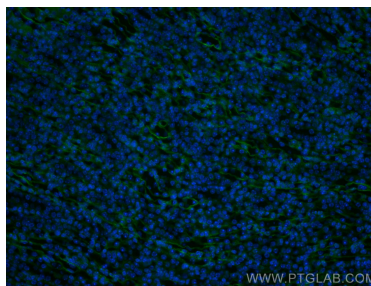
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 60055-1-Ig (MGP antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



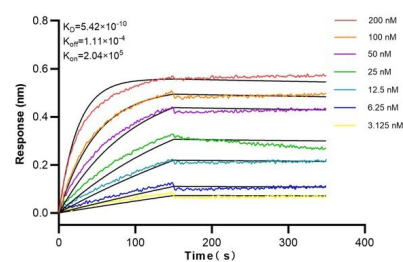
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60055-1-Ig (MGP Antibody) at dilution of 1:800 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 60055-1-Ig (MGP Antibody) at dilution of 1:800 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed mouse kidney tissue using MGP antibody (60055-1-Ig, Clone: 1A1C3) at dilution of 1:400 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Bi-layer interferometry (BLI) kinetic assays of 60055-1-Ig against Human MGP were performed. The Affinity Constant is 5.42 nM.