

For Research Use Only

CoraLite® Plus 488-conjugated Osteopontin Polyclonal antibody

Catalog Number: CL488-22952

Featured Product

4 Publications



Basic Information

Catalog Number:

CL488-22952

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG19216

GenBank Accession Number:

BC007016

GenID (NCBI):

6696

UNIPROT ID:

P10451

Full Name:

secreted phosphoprotein 1

Calculated MW:

314 aa, 35 kDa

Observed MW:

70 kDa, 44-66 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

IF-P: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF-P, FC (Intra)

Cited Applications:

IF

Species Specificity:

human, mouse, rat

Cited Species:

mouse

Positive Controls:

IF-P: rat kidney tissue,

FC (Intra): HepG2 cells,

Background Information

Osteopontin (OPN), also known as SPP1, is a secreted glycoposphoprotein that belongs to the small integrin-binding ligand N-linked glycoprotein (SIBLING) family. Originally isolated from bone, OPN has been found in kidney, vascular tissues, biological fluids, and various tumor tissues (PMID: 15138464; 16406521). OPN can interact with CD44 and integrins and regulate diverse biological processes. It has a multifaceted role in bone development and remodeling, and is also involved in the inflammatory and immune response, oncogenesis and cancer progression. The very acidic nature of OPN, as well as the presence of variable posttranslational modifications, has led to anomalous migration in SDS-polyacrylamide gels and therefore to reports of different molecular weights for OPN (PMID: 8293561). Depending on the cell and tissue source and/or the SDS-PAGE system, OPN migrates with a molecular weight of 44-80 kDa, as well as at some smaller bands correspond to peptide fragments (PMID: 8195113; 17890765).

Notable Publications

Author	Pubmed ID	Journal	Application
Rajiv Trehan	40335453	Nat Commun	
Qing Li	40231210	Cardiovasc Ther	
Ning Zhang	40180922	Nat Commun	

Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

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

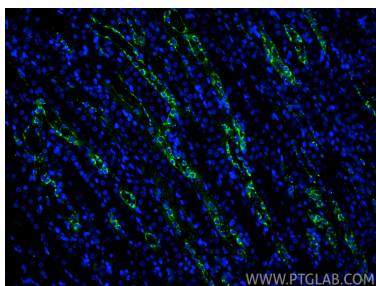
T: 4006900926

E: Proteintech-CN@ptglab.com

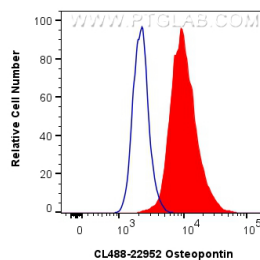
W: ptgcn.com

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

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat kidney tissue using CoraLite® Plus 488 Osteopontin antibody (CL488-22952) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HepG2 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human Osteopontin (CL488-22952) (red) or 0.8 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).