For Research Use Only

OPN, SPP1 Recombinant antibody

Catalog Number:83341-2-RR



Purification Method:

Protein A purification

Recommended Dilutions:

CloneNo.:

240206B7

IF 1:125-1:500

Basic Information

Catalog Number:

83341-2-RR

Size: 1000 μg/ml

Source:

Rabbit Isotype:

IgG

GenBank Accession Number: BC007016

GeneID (NCBI):

6696

UNIPROT ID: P10451-5

Full Name:

secreted phosphoprotein 1

Calculated MW: 314 aa, 35 kDa

Positive Controls:

IF: HepG2 cells,

Applications

Tested Applications: IF/ICC, ELISA

Species Specificity:

Human

Background Information

Osteopontin (OPN), also known as SPP1, is a secreted glycophosphoprotein that belongs to the small integrinbinding ligand N-linked glycoprotein (SIBLING) family. Originally isolated from bone, OPN has been found in kidneys, 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 corresponding to peptide fragments (PMID: 8195113; 17890765).

Storage

Storage:

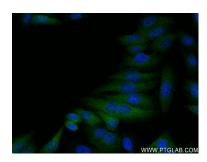
Store at -20°C. Stable for one year after shipment.

Storage Buffer

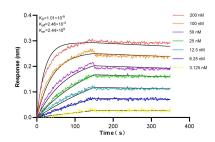
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using OPN, SPP1 antibody (83341-2-RR, Clone: 240206B7) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLL) kinetic assays of 83341-2-RR against Human OPN/SPP1 were performed. The affinity constant is 1.01 nM.