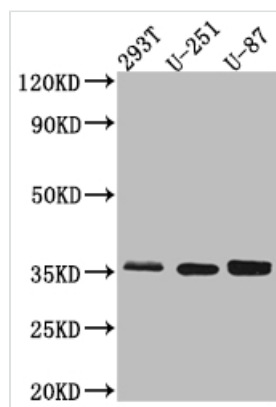




SPP1 Recombinant Monoclonal Antibody

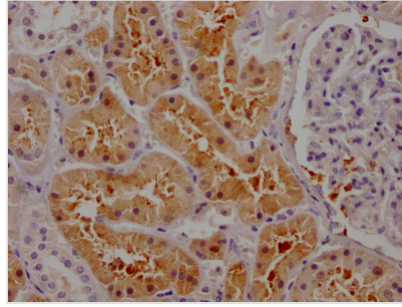
Product Code	CSB-RA261140A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P10451
Immunogen	A synthesized peptide derived from human Osteopontin
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	Binds tightly to hydroxyapatite. Appears to form an integral part of the mineralized matrix. Probably important to cell-matrix interaction.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Signal transduction; Stem cells
Gene Names	SPP1
Clone No.	10A1

Image



Western Blot

Positive WB detected in: 293T whole cell lysate, U-251 whole cell lysate, U-87 whole cell lysate
 All lanes: Osteopontin Antibody at 1:1000
 Secondary
 Goat polyclonal to rabbit IgG at 1/50000 dilution
 Predicted band size: 36, 34, 33, 34, 34 kDa
 Observed band size: 36 kDa



IHC image of CSB-RA261140A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The production process for the SPP1 recombinant monoclonal antibody consists of four key steps: first, sequencing the SPP1 monoclonal antibody gene; second, cloning the gene into a plasmid vector; third, transfecting the recombinant vector into a host cell line; fourth, purifying the SPP1 recombinant monoclonal antibody from the cell culture supernatant using affinity chromatography and finally testing and characterizing the purified antibody. The SPP1 monoclonal antibody is produced using a synthesized peptide derived from human SPP1 as the immunogen. This resulting SPP1 recombinant monoclonal antibody is highly recommended for use in ELISA, WB, and IHC applications to detect human SPP1 protein.

SPP1, also known as osteopontin, plays a critical role in the regulation of various physiological and pathological processes in cells, including bone remodeling, immune response, cell migration, and cancer progression. SPP1 is a major component of the extracellular matrix of bone, and plays a critical role in the regulation of bone remodeling by mediating the adhesion and migration of osteoclasts and osteoblasts. SPP1 is involved in the regulation of the immune response by interacting with various immune cells, including macrophages, T cells, and natural killer cells, and modulating their function and activity. SPP1 is overexpressed in various types of cancer and has been implicated in the regulation of tumor progression and metastasis by promoting cancer cell proliferation, survival, invasion, and angiogenesis.