

ARG23581 anti-Sulfatase 2 antibody [2B4]

Package: 50 µg
Store at: -20°C

Summary

Product Description	<p>Mouse Monoclonal antibody [2B4] recognizes Sulfatase 2.</p> <p>This product recognizes an epitope within the C-terminal (CT) subunit of Sulfatase 2 (Sulf-2). Sulf-2 is a novel extracellular heparan sulfate 6-O-endosulfatase, which selectively removes the critical sulfate group from the polysaccharide side chain of heparan sulfate proteoglycans, major components of the extracellular matrix, involved in cell differentiation, proliferation and migration. Sulf-2 acts as a modulator of several signalling proteins including Wnt proteins, bone morphogenetic proteins (BMPs) and fibroblast growth factors (FGFs), and is a direct transcriptional target of p53. Studies have linked Sulf-2 with several cancers, including breast, hepatocellular, and pancreatic cancer, and recently with non-small-cell lung carcinomas (Lemjabbar-Alaoui et al. 2010). Mature human Sulf-2 is a heterodimer consisting of a 50kDa C-terminal subunit, essential for both glucosamine 6-O-sulfate-endosulfatase and arylsulfatase activity, and a 75kDa N-terminal subunit which contains the catalytic centre. Mouse anti Human Sulfatase 2 (C-Terminal) antibody, clone 2B4 recognizes Sulfatase 2, showing no cross-reactivity with Sulfatase 1 in either human or mouse.</p>
Tested Reactivity	Hu, Ms
Tested Application	ELISA, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	2B4
Isotype	IgG1
Target Name	Sulfatase 2
Species	Human
Immunogen	Recombinant Human Sulfatase 2.
Conjugation	Un-conjugated
Alternate Names	HSULF-2; hSulf-2; Extracellular sulfatase Sulf-2; EC 3.1.6.-

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	IHC-P	Assay-dependent
	WB	Assay-dependent
Application Note	<p>IHC-P: Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0).</p> <p>WB: This product detects a major band of ~ 50 kDa in Sulf-2 transfected HEK293 cell lysates. A band at 135 kDa (unprocessed protein), and a fragment at 37 kDa, may also be present.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	

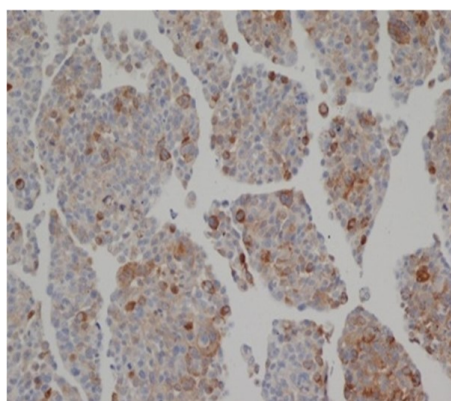
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	SULF2
Gene Full Name	sulfatase 2
Background	Heparan sulfate proteoglycans (HSPGs) act as coreceptors for numerous heparin-binding growth factors and cytokines and are involved in cell signaling. Heparan sulfate 6-O-endosulfatases, such as SULF2, selectively remove 6-O-sulfate groups from heparan sulfate. This activity modulates the effects of heparan sulfate by altering binding sites for signaling molecules (Dai et al., 2005 [PubMed 16192265]).[supplied by OMIM, Mar 2008]
Function	Exhibits arylsulfatase activity and highly specific endoglucosamine-6-sulfatase activity. It can remove sulfate from the C-6 position of glucosamine within specific subregions of intact heparin. [UniProt]
Calculated Mw	100 kDa
PTM	The conversion to 3-oxoalanine (also known as C-formylglycine, FGly), of a serine or cysteine residue in prokaryotes and of a cysteine residue in eukaryotes, is critical for catalytic activity. [UniProt]

Images



ARG23581 anti-Sulfatase 2 antibody [2B4] IHC-P image

Immunohistochemistry: Paraffin-embedded HEK293 cells transfected with SULF2 stained with ARG23581 anti-Sulfatase 2 antibody [2B4].