

Mouse Sorbitol Dehydrogenase/SORD Monoclonal Antibody | anti-SORD antibody

Anti-Sorbitol Dehydrogenase/SORD Antibody Picoband (monoclonal, 12B10G2)

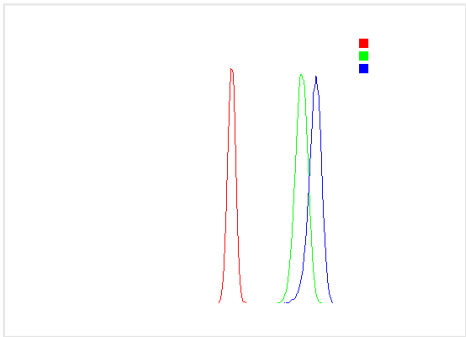
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19716	Mouse	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

Sorbitol Dehydrogenase/SORD; Monoclonal Antibody; Anti-Sorbitol Dehydrogenase/SORD Antibody Picoband (monoclonal; 12B10G2); anti-SORD antibody

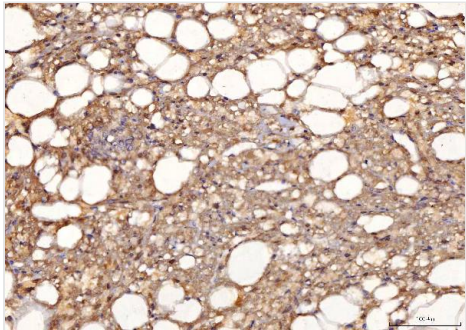
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	12B10G2
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-SORD antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Application Notes	WB: 0.25-0.5 ug/ml, Human, Mouse, Rat IHC-P: 2-5 ug/ml, Human, Rat FC/FACS: 1-3 ug/1x10 ⁶ cells, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Mouse IgG for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit for IHC(P).
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human Sorbitol Dehydrogenase/SORD recombinant protein (Position: N8-P357).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



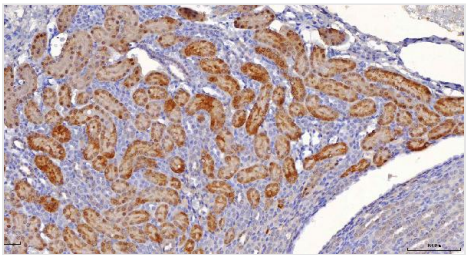
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of U2OS cells using anti-Sorbitol Dehydrogenase/SORD antibody (AAA19716). Overlay histogram showing U2OS cells stained with AAA19716 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Sorbitol Dehydrogenase/SORD Antibody (AAA19716, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



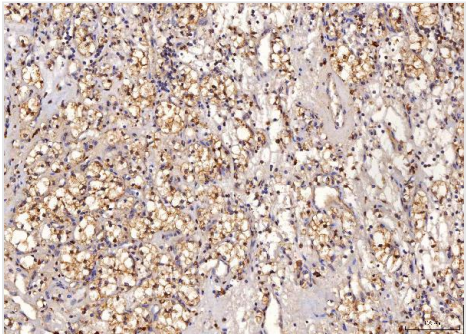
IHC (Immunohistochemistry)

Figure 4. IHC analysis of Sorbitol Dehydrogenase/SORD using anti-Sorbitol Dehydrogenase/SORD antibody (AAA19716). Sorbitol Dehydrogenase/SORD was detected in a paraffin-embedded section of human SM fatty carcinoma of the left kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Sorbitol Dehydrogenase/SORD Antibody (AAA19716) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



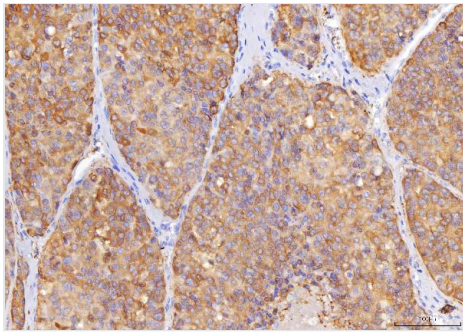
IHC (Immunohistochemistry)

Figure 5. IHC analysis of Sorbitol Dehydrogenase/SORD using anti-Sorbitol Dehydrogenase/SORD antibody (AAA19716). Sorbitol Dehydrogenase/SORD was detected in a paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Sorbitol Dehydrogenase/SORD Antibody (AAA19716) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



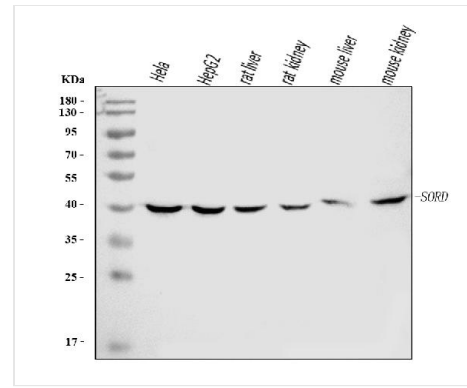
IHC (Immunohistochemistry)

Figure 3. IHC analysis of Sorbitol Dehydrogenase/SORD using anti-Sorbitol Dehydrogenase/SORD antibody (AAA19716). Sorbitol Dehydrogenase/SORD was detected in a paraffin-embedded section of human renal clear cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Sorbitol Dehydrogenase/SORD Antibody (AAA19716) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Sorbitol Dehydrogenase/SORD using anti-Sorbitol Dehydrogenase/SORD antibody (AAA19716). Sorbitol Dehydrogenase/SORD was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-Sorbitol Dehydrogenase/SORD Antibody (AAA19716) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Sorbitol Dehydrogenase/SORD using anti-Sorbitol Dehydrogenase/SORD antibody (AAA19716). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: rat liver tissue lysates, Lane 4: rat kidney tissue lysates, Lane 5: mouse liver tissue lysates, Lane 6: mouse kidney tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Sorbitol Dehydrogenase/SORD antigen affinity purified monoclonal antibody (#AAA19716) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Sorbitol Dehydrogenase/SORD at approximately 40 kDa. The expected band size for Sorbitol Dehydrogenase/SORD is at 40 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SORD antibody	Sorbitol dehydrogenase is an enzyme that in humans is encoded by the SORD gene. Sorbitol dehydrogenase (SORD) catalyzes the interconversion of polyols and their corresponding ketoses, and together with aldose reductase, makes up the sorbitol pathway that is believed to play an important role in the development of diabetic complications. The first reaction of the pathway (also called the polyol pathway) is the reduction of glucose to sorbitol by ALDR1 with NADPH as the cofactor. SORD then oxidizes the sorbitol to fructose using NAD(+) cofactor.
Product Categories/Family for anti-SORD antibody	Primary Antibodies, Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	292495088
NCBI GeneID	6652
UniProt Accession #	Q00796; Q16682; Q9UMD6; B2R655; B7Z3A6; J3JZZ5
Molecular Weight	357
NCBI Official Full Name	Sorbitol dehydrogenase
NCBI Official Synonym Full Names	sorbitol dehydrogenase
NCBI Official Symbol	SORD
NCBI Official Synonym Symbols	SORD1; HEL-S-95n
NCBI Protein Information	sorbitol dehydrogenase; L-iditol 2-dehydrogenase; epididymis secretory sperm binding protein Li 95n
UniProt Protein Name	Sorbitol dehydrogenase
UniProt Gene Name	SORD
UniProt Entry Name	DHSO_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/sorbitol-dehydrogenase-sord-antibody-clone-12b10g2-western-blot-immunohistochemistry-flow-cytometry-elisa/19716>