

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse SPARC-like 1/SPARCL1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse SPARC or recombinant human SPARC-like 1 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 348905
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse SPARC-like 1/SPARCL1 Ile17-Phe650 Accession # P70663
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

SPARCL1 (Secreted Protein, Acidic and Rich in Cysteines-like 1), also known as hevin, SC1 or MAST9, is a member of the SPARC family of extracellular glycoproteins (1, 2). SPARCL1 is an anti-adhesive protein that is widely expressed in tissues such as brain, heart, lung, muscle and kidney, but not liver (3, 4). Mouse SPARCL1 contains a 16 amino acid (aa) signal sequence and a 634 aa mature region that contains four domains: a 403 aa N-terminal acidic region, a 23 aa follistatin-like domain, a 55 aa kazal-like segment and a 148 aa calcium-binding domain that contains two EF hand motifs (3, 4). Mouse mature SPARCL1 shares 89%, 67%, 63%, 61%, 60%, and 58% aa identity with rat, human, equine, canine, porcine, and bovine SPARCL1, respectively. The follistatin-like, kazal-like and calcium-binding domains of SPARCL1 show 61% aa identity with corresponding regions of SPARC. SPARCL1 is predicted at 75 kDa, but migrates at ~130 kDa, which has been explained either by disulfide-linked homodimerization or by glycosylation and high acidity (3-5). Some truncated forms have been reported. In mouse, a 55 kDa C-terminal fragment is the only form in kidney and represent a portion of SPARCL1 in other tissues (6). In humans, a 25 kDa form is increased in liver tumors that are encapsulated, while the full-length form is downregulated in many epithelial cell-derived tumors (7, 8). SPARCL1 inhibits adhesion and spreading on a variety of substrates (5, 9). It is thought to cause antiadhesive signaling that terminates neuronal migration, consistent with production by glial and neuronal cells during development or in response to trauma (10). In tonsillar high endothelial venules (HEV), SPARCL1 may induce endothelial cell dissociation, promoting extravasation (3). SPARCL1 binds collagen; in mice, deletion causes dermal collagen fibrils that are smaller in diameter and deficient in decorin (6, 11).

PRODUCT SPECIFIC NOTICES

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