

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Fascin in ELISAs and Western blots. Detects mouse and rat Fascin in Western blots. In direct ELISAs, no cross-reactivity with recombinant human Fascin-2 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 833223
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Fascin Met1-Tyr493 Accession # Q16658
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.

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

Fascin (*that which creates fascicles* [bundles] of actin; also known as 55 kDa actin-bundling protein, p55 and singed-like protein) is an intracellular 55-58 kDa member of the fascin family of proteins. It has a restricted expression pattern, being found in oligodendrocytes, select endothelium, cerebellar stellate neurons and blood, interdigitating, and thymic medullary dendritic cells. Fascin is found associated with actin in filopodia, and serves to coordinate and stabilize actin bundle formation, both in normal cells and tumor cells. In the latter cell type, filopodia have been renamed invadopodia, and their appearance is crucial for the creation of a stable platform that coordinates local matrix degradation. Human fascin is 493 amino acids (aa) in length. It contains an N-terminal fascin-like domain (aa 139-256) that contains part of one of two actin-binding sequences (aa 136-143), followed by two additional fascin-like domains (aa 260-378 and 383-493), the latter of which contains the second actin-binding sequence (aa 386-395). There are also two acetylation sites and two utilized phosphorylation sites at Ser38 and Ser39. Phosphorylation of the latter site inhibits fascin interaction with actin. At least two isoform variants may exist. One contains a 12 aa substitution for aa 427-493, while a second shows a deletion of aa 371-426. Full-length human fascin shares 97% aa sequence identity with mouse fascin. Two additional human fascins termed retinal and testis fascin have been identified. They are products of distinct genes and share 56% and 27% aa sequence identity with the standard (p55) fascin, respectively.

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