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Product datasheet for AM09124SU-N

Drebrin (DBN1) (C-term) Mouse Monoclonal Antibody [Clone ID: MX823]

Product data:

Product Type:	Primary Antibodies
Clone Name:	MX823
Applications:	IF, IHC, IP, WB
Recommended Dilution:	**Immunofluorescence Microscopy.** **Immunoprecipitation.** **Immunoblotting** (Western: 1/100). **Immunohistochemistry on Frozen Sections:** 1/10-1/50 (1h at RT).
Reactivity:	Bovine, Canine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic C-terminal peptide (aa 632-649) coupled to KLH.
Specificity:	AM09124SU-N (clone MX823) specifically reacts with drebrin, a widespread actin-associating protein of 70 kD (SDS-PAGE mobility shows Mr 120,000). Positive staining was found in many tissues, including diverse epithelia and carcinoma (e.g. in epidermis basal cells are positive, whereas overlying cells are negative; also positive: regenerating epithelium during wound healing; basal cell carcinoma; skin melanoma), specific types of endothelia and smooth muscle; especially prominent in the mesangial cells of renal glomeruli and in the Sertoli cells of testis. Also positive: epithelia of hair follicles and eccrine sweat glands. Consistently negative were, however, hepatocytes and cross-striated muscle. **Reactivities on Cultured Cell lines:** Primary human keratinocytes, U333, MCF-7, SV80; B16 (mouse melanoma cells).
Formulation:	State: Supernatant State: Hybridoma Culture Supernatant Preservative: 0.09% Sodium Azide
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.

View online »

Gene Name: drebrin 1

Database Link: Entrez Gene 56320 Mouse Entrez Gene 1627 Human Q16643

Background: Drebrin has been recently identified as a member of the newly identified ADF-H family of actin-binding proteins that share the structurally conserved actin-depolymerizing factor (ADF) binding module. Structurally related proteins, homologous to drebrin include Abp1/SH3P7 and HIP55/Drebrin F. Drebrin is composed of a single ADF-H domain at its N-terminus, followed by a non-conserved central region and a C-terminal SH3 domain. Drebrin is probably involved in actin remodeling. It colocalizes with actin filaments and dendritic-like cell processes. In drebrin-overexpressing fibroblasts, drebrin binds to F-actin with high affinity, it binds to and dissociates F-actin stabilizing proteins such as alpha-actinin, fascin, and tropomyosin from actin filaments.

Drebrin is thought to play a central role in the formation of axons and dendrites during neuronal development and in neuronal plasticity in the adult brain. The expression of each drebrin isoform is regulated throughout distinct phases in neuronal development. The earliest embryonic form E1, is thought to function in migration, while the E2 isoform, which replaces E1 during embryogenesis, is believed to play a role in migration as well as formation of axons and dendrites. Drebrin E2 is present at low levels in the adult brain. The drebrin A isoform, which is only present in mature neurons, is assumed to be involved in synaptic plasticity. Drebrin E2 and A isoforms are targeted to different regions of actin localization. In neurons, the E2 isoform localizes to the submembrane region, while the A isoform is specifically located and evenly distributed throughout the post-synaptic dendritic spine.

Synonyms: DBN1, DBN-1, D0S117E, DKFZp434D064,drebrin 1