

Mouse Anti-Agrin [MD350]: MC0201, MC0201RTU7

Intended Use: For Research Use Only

Description: Agrin is a molecule that resides in the basal lamina of muscle cells and directs key events in post synaptic differentiation. It is an essential extracellular matrix component which promotes clustering of nicotinic acetylcholine receptors (nAChRs) on the cell surface and their localization to the neuromuscular junction.. Agrin, MuSK and Rapsyn are all essential components for AChR aggregation, through an unknown mechanism. The C-terminal region of agrin is released into the medium, interacts with receptors on the muscle surface and induces AChR aggregation. The central region contains two O-linked glycosylation sites and a domain homologous to domain III of laminin. The N-terminal region anchors agrin to the extracellular matrix via other basal membrane components. Muscle alpha-dystroglycan has been postulated to be the receptor for the clustering activity of agrin; however, this is a point of contention. Tyrosine phosphorylation has been implicated as a required early step in AChR aggregation. Interestingly, a unique receptor tyrosine kinase, designated MuSK, has been discovered that interacts with Agrin and is specifically localized to developing muscle.

Specifications

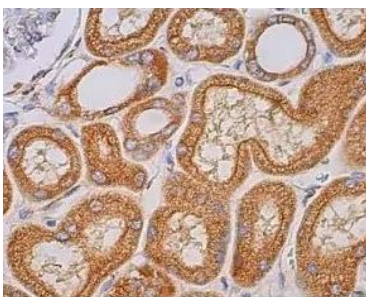
Clone:	MD350
Source:	Mouse
Isotype:	IgM/k
Reactivity:	Human, mouse, rat
Immunogen:	Epitope aa 1913-1942 near the C-terminus of rat Agrin
Localization:	Membrane, cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IF, IP, WB
Package:	

Description	Catalog No.	Size
Agrin [MD350] Concentrated	MC0201	1 ml
Agrin [MD350] Prediluted	MC0201RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Kidney, colon, lung, skeletal muscle
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney stained with anti-Agrin using DAB

References:

1. Identification and validation of basement membrane-associated gene AGRN as prognostic and immune-associated biomarkers in colorectal cancer patients. | Li, J. et al. J Cell Mol Med. 28: e70010, 2024.
2. Oncogenic Properties of NEAT1 in Prostate Cancer Cells Depend on the CDC5L-AGRIN Transcriptional Regulation Circuit. | Cancer Res. 78: 4138-4149, 2018.