

Collybistin

Cat.No. 261 111; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: not recommended IP: yes ICC: 1 : 500 IHC: not tested yet IHC-P/FFPE: not tested yet
Clone	197A10
Subtype	IgG2b (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 471 from rat Collybistin (UniProt Id: Q9QX73)
Epitop	Epitop: AA 4 to 229 from rat Collybistin (UniProt Id: Q9QX73)
Reactivity	Reacts with: rat (Q9QX73), mouse (Q3UTH8). Other species not tested yet.
Specificity	Specific for collybistin, immunogen present in all three described splice-variants.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The GDP/GTP-exchange factor **collybistin** is composed of a dbl homology domain (DH) and a pleckstrin homology domain (PH) connected by a linker sequence. Three splice variants with different C-terminal regions have been described, so far.

Collybistin is supposed to be involved in the clustering of gephyrin, a scaffolding protein linking glycine and GABA receptors to microtubuli.

Selected General References

The role of collybistin in gephyrin clustering at inhibitory synapses: facts and open questions. Papadopoulos T, Soykan T
Frontiers in cellular neuroscience (2011) 5: 11.

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Increased network excitability and impaired induction of long-term potentiation in the dentate gyrus of collybistin-deficient mice in vivo.

Jedlicka P, Papadopoulos T, Deller T, Betz H, Schwarzacher SW
Molecular and cellular neurosciences (2009) 41(1): 94-100.

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The Journal of neuroscience : the official journal of the Society for Neuroscience (2004) 24(25): 5816-26.

Collybistin, a newly identified brain-specific GEF, induces submembrane clustering of gephyrin.

Kins S, Betz H, Kirsch J
Nature neuroscience (2000) 3(1): 22-9.