

Rudolf-Wissell-Str. 28 37079 Göttingen, Germany

Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

Collybistin

Cat.No. 261 011; 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 μ l H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1: 1000 (ECL detection) IP: not recommended ICC: not recommended IHC: not recommended IHC-P/FFPE: not tested yet
Clone	161B11
Subtype	IgG2a (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. (K.O. verified)

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.

Complex role of collybistin and gephyrin in GABAA receptor clustering. Saiepour L, Fuchs C, Patrizi A, Sassoè-Pognetto M, Harvey RJ, Harvey K The Journal of biological chemistry (2010) 285(38): 29623-31.

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.

The GDP-GTP exchange factor collybistin: an essential determinant of neuronal gephyrin clustering.

Harvey K, Duguid IC, Alldred MJ, Beatty SE, Ward H, Keep NH, Lingenfelter SE, Pearce BR, Lundgren J, Owen MJ, Smart TG, et al. 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.