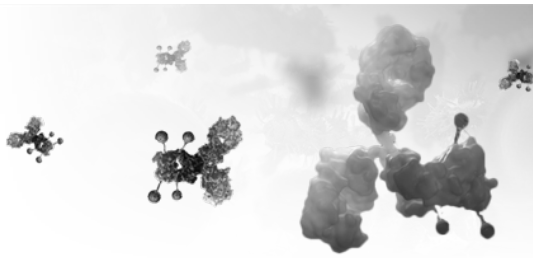

Mouse anti-Rat cGB-PDE monoclonal antibody, clone 65/dHC-QEF (CABT-B9185)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Rat cGB-PDE aa. 2-108
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat
Clone	65/dHC-QEF
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF
Format	Liquid
Concentration	250 μg/ml
Size	50 μg, 150 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	cGMP is involved in nitric oxide signaling, as well as cell signaling associated with natriuretic

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	peptides and guanylins. Intracellular targets for cGMP include cGMP-dependent protein kinase, cyclic nucleotide-gate ion channels, and cGMP-Binding PhosphoDiesterases (cGB-PDE). Tissue levels of cGMP are determined by guanylyl cyclases that catalyze the formation of cGMP and cyclic nucleotide PDEs that catalyze the breakdown of cGMP. In the PDE superfamily PDE2, PDE5, PDE6, and PDE10 have dimeric structures that contain highly cGMP-specific allosteric cGMP binding sites in addition to a phosphodiesterase catalytic site. PDE5 is highly expressed in aorta and lung, but is also expressed in intestine, kidney, adrenal gland, cerebellum, and cerebrum. In the cerebellum, PDE5 is expressed in the Purkinje cell layer during neonatal development. PDE5 is also abundant in vascular smooth muscle cells where it is involved in regulating cGMP levels and vascular smooth muscle tonicity. Thus, PDE5 is important for regulating cGMP levels in both neuronal and non-neuronal tissues that utilize cGMP signaling pathways for the regulation of cell function.
Keywords	PDE5A; phosphodiesterase 5A, cGMP-specific; CN5A; PDE5; CGB-PDE; cGMP-specific 3, 5-cyclic phosphodiesterase; phosphodiesterase isozyme 5; cGMP-specific phosphodiesterase PDE5A2; cGMP-specific phosphodiesterase type 5A; cGMP-binding cGMP-specific 3, 5-cyclic nucleotide phosphodiesterase;

GENE INFORMATION

Entrez Gene ID	8654
UniProt ID	O76074

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