



PDE9A mouse mAb

Catalog No	YP-mAb-18211
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PDE9A
Immunogen	Synthesized peptide derived from human PDE9A
Specificity	This antibody detects endogenous levels of PDE9A at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HSPDE9A2;High affinity cGMP-specific 3';5'-cyclic phosphodiesterase 9A; EC:3.1.4.35;PDE9A;5'-cyclic phosphodiesterase 9A (EC 3.1.4.35)
Observed Band	50 kDa
Calculated Molecular Weight	68 kDa
Cell Pathway	[Isoform PDE9A1]: Cell projection, ruffle membrane . Cytoplasm, perinuclear region . Golgi apparatus . Endoplasmic reticulum . Cell membrane, sarcolemma .; [Isoform PDE9A2]: Cell projection, ruffle membrane . Cytoplasm, perinuclear region .; [Isoform PDE9A3]: Cytoplasm . Endoplasmic reticulum .; [Isoform PDE9A17]: Cytoplasm . Endoplasmic reticulum .
Tissue Specificity	Expressed in all tissues examined (testis, brain, small intestine, skeletal muscle, heart, lung, thymus, spleen, placenta, kidney, liver, pancreas, ovary and prostate) except blood (PubMed:9624146). Highest levels in brain, heart, kidney, spleen, prostate and colon. Isoform PDE9A12 is fo
Function	Specifically hydrolyzes the second messenger cGMP, which is a key regulator of many important physiological processes. Highly specific: compared to other members of the cyclic nucleotide phosphodiesterase family, has the highest affinity and selectivity for cGMP . Specifically regulates natriuretic-peptide-dependent cGMP signaling in heart, acting as a regulator of cardiac hypertrophy



in myocytes and muscle. Does not regulate nitric oxide-dependent cGMP in heart . Additional experiments are required to confirm whether its ability to hydrolyze natriuretic-peptide-dependent cGMP is specific to heart or is a general feature of the protein (Probable). In brain, involved in cognitive function, such as learning and long-term memory (By similarity).

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images