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Guanylyl Cyclase beta 1 (GUCY1B3) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8171b

Product Information

Application	WB, E
Primary Accession	Q02153
Other Accession	NP_000848
Reactivity	Human
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB7767
Calculated MW	70514
Antigen Region	589-619

Additional Information

Gene ID	2983
Other Names	Guanylate cyclase soluble subunit beta-1, GCS-beta-1, Guanylate cyclase soluble subunit beta-3, GCS-beta-3, Soluble guanylate cyclase small subunit, GUCY1B3, GUC1B3, GUCSB3, GUCY1B1
Target/Specificity	This GUCY1B3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected between 589-619 amino acids of human GUCY1B3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Guanylyl Cyclase beta 1 (GUCY1B3) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GUCY1B1 (HGNC:4687)
Function	Beta subunit of soluble guanylate cyclase (sGC), a key enzyme in nitric oxide

(NO) signaling. sGC functions as a heterodimer consisting of one alpha and one beta subunit. It serves as the primary intracellular receptor for NO, which binds to a heme prosthetic group located on the beta subunit. Upon NO binding, sGC catalyzes the conversion of GTP into cyclic GMP (cGMP), thereby transmitting the NO signal into an ubiquitous intracellular second messenger.

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P16068}.

Tissue Location Detected in brain cortex and cerebellum (at protein level).

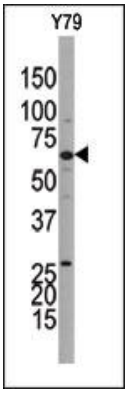
Background

Soluble guanylate cyclase (sGC), a heterodimeric protein consisting of an alpha and a beta subunit, catalyzes the conversion of GTP to the second messenger cGMP and functions as the main receptor for nitric oxide and nitrovasodilator drugs.

References

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Lucas, K.A., et al., Pharmacol. Rev. 52(3):375-414 (2000).
Papapetropoulos, A., et al., J. Cell. Physiol. 167(2):213-221 (1996).
Giuili, G., et al., Hum. Genet. 91(3):257-260 (1993).
Giuili, G., et al., FEBS Lett. 304(1):83-88 (1992).

Images



Western blot analysis of anti-GUCY1B3 Pab(AP8171b) in Y79 cell line lysate. GUCY1B3(arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.