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Datasheet for ABIN5004163

anti-GUCY1A1 antibody (AA 301-400) (Alexa Fluor 750)

Overview

Quantity:	100 µL
Target:	GUCY1A1
Binding Specificity:	AA 301-400
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GUCY1A1 antibody is conjugated to Alexa Fluor 750
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Guanylyl Cyclase alpha 1
Isotype:	IgG
Cross-Reactivity:	Rat
Predicted Reactivity:	Human, Mouse, Dog, Cow, Pig, Horse, Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	GUCY1A1
Alternative Name:	Guanylyl Cyclase alpha 1 (GUCY1A1 Products)

Target Details

Background: Synonyms: GUCA3, MYMY6, GC-SA3, GUC1A3, GUCA3, GUCY1A1, Guanylate cyclase soluble subunit alpha-3, GCS-alpha-3, GCS-alpha-1, Soluble guanylate cyclase large subunit, GUCY1A3

Background: Guanylate cyclases belong to the adenylyl cyclase class-4/guanylyl cyclase family. There are two forms of guanylate cyclase. The soluble forms, known as GCS or sGC, act as receptors for nitric oxide. The membrane-bound receptor forms, known as GC, are peptide hormone receptors. GCS, a cGMP-synthesizing enzyme, is the major receptor for the neurotransmitter nitric oxide (NO). It plays a crucial role in smooth muscle contractility, platelet reactivity and neurotransmission. GCS is a heme containing heterodimer, consisting of one alpha subunit, designated GCS-alpha-1, and one beta subunit. The heme moiety mediates NO activation, and this heme group also binds carbon monoxide, which weakly stimulates the enzyme. Both NO and CO stimulation are enhanced by the allosteric activator 3-(5'-hydroxymethyl-2-furyl)-benzyl-indazole, YC-1. YC-1 can also stimulate GCS in a NO-independent manner. Both the alpha and beta subunits are required for cGMP generation, and at least two isoforms exist for each subunit. Heterodimers consisting of alpha-1/beta-1 and alpha-2/beta-1 have been identified, and both display similar enzymatic activity.

Gene ID: 2982

UniProt: [Q02108](#)

Pathways: [Myometrial Relaxation and Contraction](#)

Application Details

Application Notes: IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be

Handling

handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.

Expiry Date: 12 months