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Anti-GUCY1A3 Antibody

Catalog # AP95850

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	Q02108
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	77452

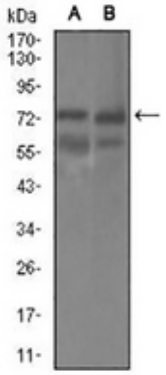
Additional Information

Gene ID	2982
Other Names	GUC1A3; GUCSA3; GUCY1A1; Guanylate cyclase soluble subunit alpha-3; GCS-alpha-3; GCS-alpha-1; Soluble guanylate cyclase large subunit
Target/Specificity	Recombinant fusion protein of human GUCY1A3 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

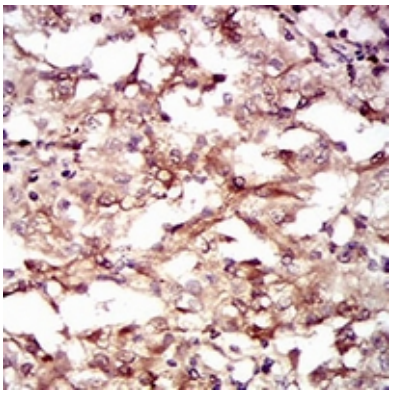
Protein Information

Name	GUCY1A1 (HGNC:4685)
Function	Alpha 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.
Tissue Location	Detected in brain cortex and lung (at protein level).

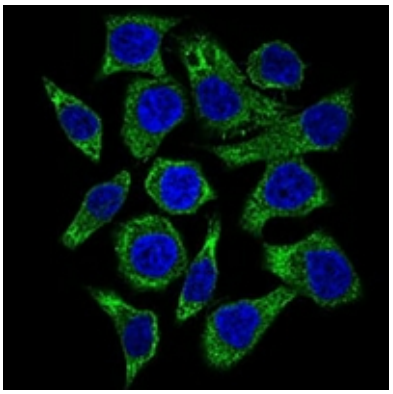
Images



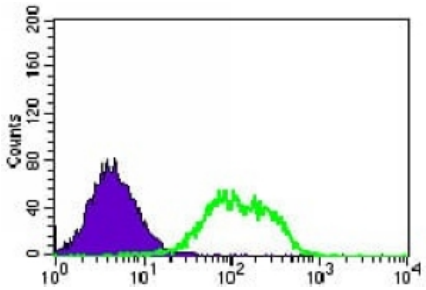
Western blot analysis of GUCY1A3 expression in HEK293 (A), Raji (B) whole cell lysates. (Predicted band size: 78 kD; Observed band size: 76 kD)



Immunohistochemical analysis of GUCY1A3 staining in human renal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GUCY1A3 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HEK293 cells using Anti-GUCY1A3 Antibody (green) and negative control (red).

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