10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-GUCY1A3 Antibody

Catalog # AP51251

Product Information

Application	WB, IHC
Primary Accession	Q02108
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
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	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GUCY1A3. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

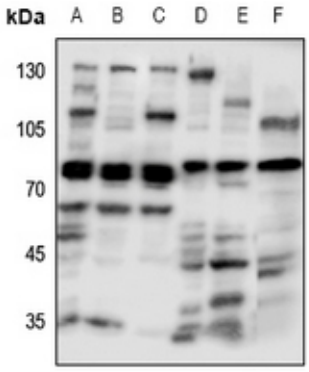
Protein Information

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).

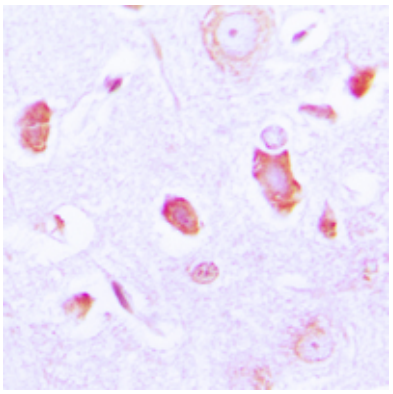
References

Giuili G.,et al.FEBS Lett. 304:83-88(1992).
Gansemans Y.,et al.Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.
Zabel U.,et al.Biochem. J. 335:51-57(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).

Images



Western blot analysis of GUCY1A3 expression in HEK293T (A), Hela (B), H446 (C), mouse lung (D), mouse kidney (E), rat kidney (F) whole cell lysates. (Predicted band size: 77 kD; Observed band size: 77; 70 kD)



Immunohistochemical analysis of GUCY1A3 staining in human brain 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.

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