

Product datasheet for **AP06153PU-M**

GUCY1B1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to the N-terminus of Human GCS- β -1.
Specificity:	This antibody detects endogenous levels of Guanylate Cyclase β 1/3 protein. (region surrounding Val21)
Formulation:	PBS, pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE) Preservative: 15 mM sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~70 kDa
Gene Name:	guanylate cyclase 1, soluble, beta 3
Database Link:	<u>Entrez Gene 2983 Human Q02153</u>



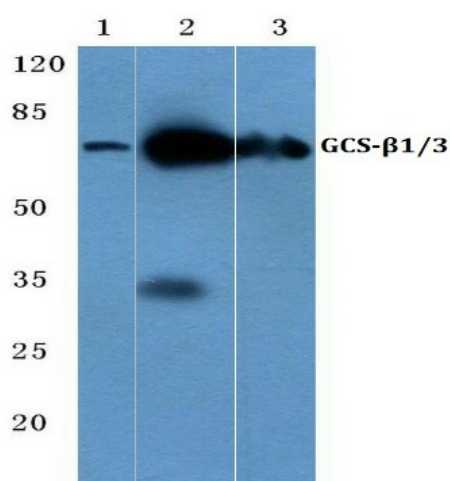
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Background:

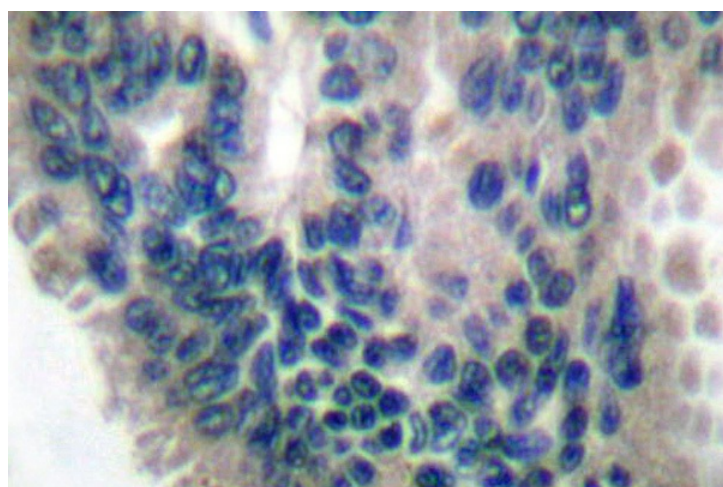
Guanylate cyclases belong to the adenylyl cyclase class-4/guanylyl cyclase family. There are two forms of guanylate cyclase, a soluble form (GCS or sGC), which act as receptors for nitric oxide and a membrane-bound receptor form (GC), which are peptide hormone receptors. The GC-C protein is composed of an extracellular domain, a single transmembrane domain, and a cytoplasmic region consisting of a kinase-like domain and a catalytic domain. It is expressed as two differentially glycosylated forms, a 130 kDa precursor form present in the endoplasmic reticulum and a 145 kDa form present on the plasma membrane. Ligand binding to the extracellular domain of GC-C promotes the accumulation of cGMP. GC-C acts as the receptor for heatstable enterotoxins, small peptides secreted by some pathogenic strains of *E. coli* that cause severe secretory diarrhea. GC-C also binds to guanylin and uroguanylin peptides, which modulate renal function in response to oral salt load.

Synonyms:

GCS-beta-1, GCS-beta-3, GUC1B3, GUCSB3, GUCY1B1, sGC beta

Product images:


Western Blot analysis using Guanylate cyclase soluble GUCY1B3 Antibody at 1/500 dilution. Lane 1: HEK293T whole cell. Lane 2: Mouse kidney tissue lysate. Lane 3: Rat kidney tissue lysate.



Immunohistochemistry analysis of Guanylate cyclase soluble GUCY1B3 (Antibody) in paraffin-embedded human lung carcinoma tissue.