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GUCY2D

Mouse monoclonal antibody raised against a partial recombinant GUCY2D.
Catalog # AT2301a

Product Information

Application	WB, IF, E
Primary Accession	Q02846
Other Accession	NM_000180
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG
Clone Names	1E7
Calculated MW	120059

Additional Information

Gene ID	3000
Other Names	Retinal guanylyl cyclase 1, RETGC-1, Guanylate cyclase 2D, retinal, Rod outer segment membrane guanylate cyclase, ROS-GC, GUCY2D, CORD6, GUC1A4, GUC2D, RETGC, RETGC1
Target/Specificity	GUCY2D (NP_000171, 521 a.a. ~ 630 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	GUCY2D is for research use only and not for use in diagnostic or therapeutic procedures.

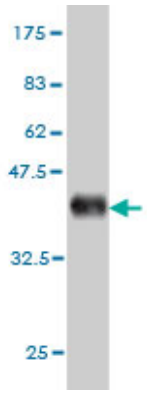
Background

This gene encodes a retina-specific guanylate cyclase, which is a member of the membrane guanylyl cyclase family. Like other membrane guanylyl cyclases, this enzyme has a hydrophobic amino-terminal signal sequence followed by a large extracellular domain, a single membrane spanning domain, a kinase homology domain, and a guanylyl cyclase catalytic domain. In contrast to other membrane guanylyl cyclases, this enzyme is not activated by natriuretic peptides. Mutations in this gene result in Leber congenital amaurosis and cone-rod dystrophy-6 diseases.

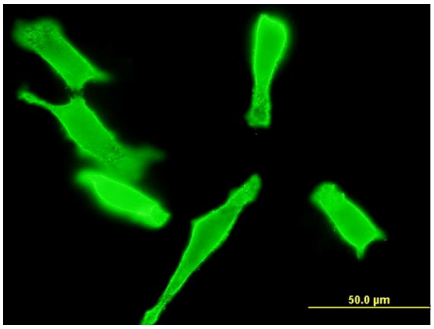
References

Dengue hemorrhagic fever is associated with polymorphisms in JAK1. Silva LK, et al. Eur J Hum Genet, 2010 Jun 30. PMID 20588308.A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000.Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.Differential macular morphology in patients with RPE65-, CEP290-, GUCY2D-, and AIPL1-related Leber congenital amaurosis. Pasadhika S, et al. Invest Ophthalmol Vis Sci, 2010 May. PMID 19959640.Mutations that are a common cause of Leber congenital amaurosis in northern America are rare in southern India. Sundaresan P, et al. Mol Vis, 2009 Sep 4. PMID 19753312.

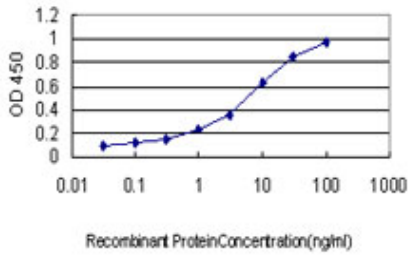
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.73 KDa) .



Immunofluorescence of monoclonal antibody to GUCY2D on HeLa cell . [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged GUCY2D is approximately 0.1ng/ml as a capture antibody.