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

GNB3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant GNB3.
Catalog # AT2228a

Product Information

Application	WB, IF
Primary Accession	P16520
Other Accession	BC002454
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	M1-1-1D5
Calculated MW	37221

Additional Information

Gene ID	2784
Other Names	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-3, Transducin beta chain 3, GNB3
Target/Specificity	GNB3 (AAH02454, 1 a.a. ~ 340 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200
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	GNB3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

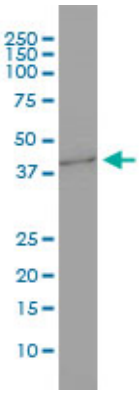
Background

Heterotrimeric guanine nucleotide-binding proteins (G proteins), which integrate signals between receptors and effector proteins, are composed of an alpha, a beta, and a gamma subunit. These subunits are encoded by families of related genes. This gene encodes a beta subunit. Beta subunits are important regulators of alpha subunits, as well as of certain signal transduction receptors and effectors. A single-nucleotide polymorphism (C825T) in this gene is associated with essential hypertension and obesity. This polymorphism is also associated with the occurrence of the splice variant GNB3-s, which appears to have increased activity. GNB3-s is an example of alternative splicing caused by a nucleotide change outside of the splice donor and acceptor sites. Additional splice variants may exist for this gene, but they have not been fully described.

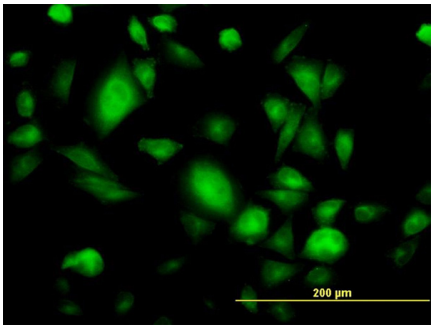
References

C825T polymorphism of the GNB3 gene on valproate-related metabolic abnormalities in bipolar disorder patients. Chang HH, et al. J Clin Psychopharmacol, 2010 Oct. PMID 20814328.Associations of markers in 11 obesity candidate genes with maximal weight loss and weight regain in the SOS bariatric surgery cases. Sarzynski MA, et al. Int J Obes (Lond), 2010 Aug 24. PMID 20733583.A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.Association between common variation in genes encoding sweet taste signaling components and human sucrose perception. Fushan AA, et al. Chem Senses, 2010 Sep. PMID 20660057.Genetic polymorphisms related to efficacy and overuse of triptans in chronic migraine. Gentile G, et al. J Headache Pain, 2010 Oct. PMID 20652353.

Images



GNB3 monoclonal antibody (M01), clone M1-1-1D5
Western Blot analysis of GNB3 expression in HepG2 (Cat # L019V1).



Immunofluorescence of monoclonal antibody to GNB3 on HepG2 cell. [antibody concentration 10 ug/ml]