

Gab1 Antibody (Ascites)

Mouse Monoclonal Antibody (Mab)

Catalog # AM3111a

Product Information

Application	WB, E
Primary Accession	Q13480
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	1AT1979
Calculated MW	76616

Additional Information

Gene ID	2549
Other Names	GRB2-associated-binding protein 1, GRB2-associated binder 1, Growth factor receptor bound protein 2-associated protein 1, GAB1
Target/Specificity	This Gab1 antibody is generated from mice immunized with a GST fusion protein encoding full length human GAB1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	fomat Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Gab1 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GAB1
Function	Adapter protein that plays a role in intracellular signaling cascades triggered by activated receptor-type kinases. Plays a role in FGFR1 signaling. Probably involved in signaling by the epidermal growth factor receptor (EGFR) and the insulin receptor (INSR). Involved in the MET/HGF-signaling pathway (PubMed: 29408807).

Background

The protein encoded by this gene is a member of the IRS1-like multisubstrate docking protein family. It is an important mediator of branching tubulogenesis and plays a central role in cellular growth response, transformation and apoptosis. Two transcript variants encoding different isoforms have been found for this gene.

References

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.

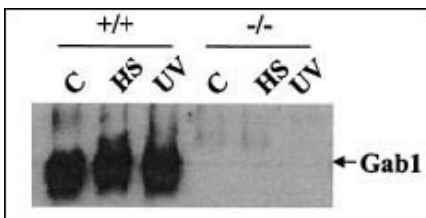
Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Grb2-associated binder 1 (Gab1) genetic polymorphism, Helicobacter pylori infection, and chronic atrophic gastritis among older adults from Germany. Gao L, et al. Mol Carcinog, 2010 Oct. PMID 20602450.

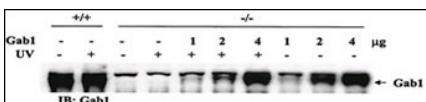
New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.

Assembly of the Sos1-Grb2-Gab1 ternary signaling complex is under allosteric control. McDonald CB, et al. Arch Biochem Biophys, 2010 Feb 15. PMID 20005866.

Images



Wild-type (+/+) and Gab1^{-/-} (-/-) cells were heat shocked (HS) at 42°C for 1 h or irradiated with UV-B light (400 J/m²) and then incubated at 37° for 1 h. Cell lysates were prepared and subjected to immunoprecipitation (IP) with an anti-JNK2 antibody. The immunoprecipitates were resolved by SDS- PAGE and immunoblotted (IB) with anti-Gab1 antibody. Data courtesy of Dr. GS Feng at The Burnham Institute.



Rescue of the JNK pathway by expression of wild-type Gab1 in Gab1^{-/-} cells. Gab1^{-/-} cells were transiently transfected with 1, 2, or 4 of the expression construct for human Gab1 cDNA, using the GenePORTER 2 transfection reagent (Gene Therapy Systems Inc.). After incubation, the cells were irradiated with UV-B light at 400 J/m² or left untreated. Exogenous expression of Gab1 in transfected cells was confirmed by anti-Gab1 immunoblot analysis with wild-type cells as positive control. +/+, wild-type cells; -/-, Gab1^{-/-} cells. (Mol. Cell. Biol. 2004 Feb 15;24(4):1531-1539)

Citations

- [Acquired substrate preference for GAB1 protein bestows transforming activity to ERBB2 kinase lung cancer mutants.](#)
- [Role of Gab1 in UV-induced c-Jun NH2-terminal kinase activation and cell apoptosis.](#)