

GA13 PROTEIN

Gα13 Protein

Cat. #: 10138

Product Name: Gα₁₃ Protein

Synonyms: Guanine nucleotide-binding protein subunit alpha-13, Galpha 13, G13

Source: Human, recombinant full length, His6-tag

Expression Host Species: sf9 cells

Molecular Weight: 44 kDa

Purity: >95% by SDS-PAGE

Introduction: Gα13 belongs to the G12 family of heterotrimeric guanine nucleotide-binding proteins, and has intrinsic GTPase activity. Gα13 has been revealed to play critical roles in transformation, normal hemostasis and thrombosis, growth factor-induced cell migration, angiogenesis, and salt-induced hypertension.

Amino Acid Sequence (1-377)

**MADFLPSRSVLSVCFPGCLLTSGEAEQQRKSKEIDKCLSREKTYVKRLVKILLGAGESGKSTFLKQ
MRIIHGQDFDQRAREEFRPTIYSNVIKGMRLVLDAREKLHIPWGDNSNQQHGDKMMSFDTRAPMAAQ
GMVETRVFLQYLP AIRALWADSGIQNAYDRRREFQLGESVKYFLDNLDKLGEPDYIPSQQDILLARRPTK
GIHEYDFEIKNVPFKMVDVGGQRSEKRWFECDVSVTSILFLVSSSEFDQVLMEDRLTNRLTESLNIFET
IVNNRVFSNVSIIILFNKTDLLEEKVQIVSIKDYFLEFEGDPHCLRDVQKFLVECFRNKRRDQQKPLYH
HFTTAINTENIRLVFRDVKDTILHDNLKQLMLQ**

Properties

Physical Appearance (form): Dissolved in 20mM Tris-HCl, pH8.0, 150mM NaCl.

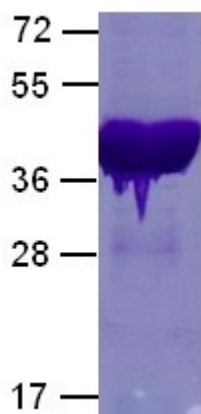
Physical Appearance (form): White or clear

Concentration: 1 mg/mL

Storage: -80°C

Preparation Instructions:

Centrifuge the vial before open the cap and reconstitute in water. Adding of 10 mM β-mercaptoethanol or 1 mM DTT into the solution to protect the protein is recommended and using of non-ionic detergents such as n-Dodecyl β-D-maltoside (DoDM) or polyethylene detergents (e.g. C12E10) also help to stabilize the protein. Avoid repeated freezing and thawing after reconstitution. The purity of His-tagged Gα13 was determined by SDS-PAGE and Coomassie Brilliant Blue Staining.



References:

1. Gong, H. et al., *Science* 327: 340–343, 2010.
2. Kabouridis, P. S. et al., *Molec. Cell. Biochem.* 144: 45–51, 1995.
3. Kilts, J. D. et al., *J. Cardiovasc. Pharm.* 50: 299–303, 2007.
4. Moers, A. et al., *Nature Med.* 9: 1418–1422, 2003.
5. Offermanns, S. et al., *Science* 275: 533–536, 1997.
6. Radhika, V. et al., *J. Biol. Chem.* 279: 49406–49413, 2004.
7. Ruppel, K. M. et al., *Proc. Nat. Acad. Sci.* 102: 8281–8286, 2005.
8. Shan, D. et al., *Dev. Cell* 10: 707–718, 2006.
9. Wirth, A. et al., *Nature Med.* 14: 64–68, 2008.