

## GA13 PROTEIN

### Gα13 Protein

**Cat. #:** 10138

**Product Name:** Gα<sub>13</sub> 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  
IVNNRVFSNVSIIILFNKTDLLEEKVQIVSIKDYFLEFEGDPHCLRDVQKFLVECFRNKRRDQQQKPLYH  
HFTTAINTENIRLVFRDVKDITLHDNLKQLMLQ

#### Properties

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

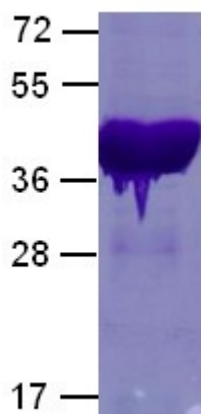
**Physical Appearance (form):** White or clear

**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.