

## Purified Rabbit Anti-human G $\alpha$ <sub>i2</sub>

**Catalog Number:** TP374

**Lot Number:** 062600

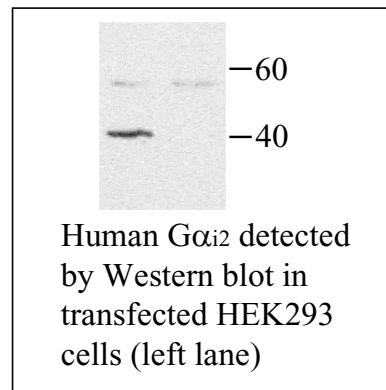
**Content:** Protein A purified rabbit IgG, 200  $\mu$ g, with 0.1% sodium azide, lyophilized.

(Reconstitute to 1 mg/ml by adding 200  $\mu$ l PBS)

**Product Description and Usage:** For research use only. This polyclonal antibody, which reacts with the G $\alpha$ <sub>i2</sub> protein, was generated using *E. coli*-expressed human G $\alpha$ <sub>i2</sub> (a.a. 231-351) as an immunogen. The tested titer for Western blot is 1:5,000. The Ab can also be used for immunoprecipitation. Cross-react with G $\alpha$ <sub>i3</sub>, and partially with G $\alpha$ <sub>i1</sub>.

**Storage Condition:** 4°C for short term storage or -20°C in small aliquots for long term storage. Avoid repeated freeze and thaw.

**Background:** G $\alpha$ <sub>i2</sub> is a 40-41 kDa alpha-subunit of heterotrimeric protein, that shares sequence homology with G $\alpha$ <sub>i3</sub> and G $\alpha$ <sub>i1</sub>. All these G proteins can be ADP-ribosylated at the carboxy terminal Cys of the CAAX sequence, interfering with receptor coupling. G $\alpha$ <sub>i2</sub>



is expressed widely in tissues and cell lines. Activation of PLC- $\beta$  by G $\alpha$ <sub>i</sub>-coupled receptors is the result of release of G $\beta\gamma$  subunits from G $\alpha$ <sub>i</sub>. G $\alpha$ <sub>i2</sub> regulates potassium channel activation. Mutation at Arg<sup>179</sup> has been identified in tumors. This and the Q205L mutant inhibit adenylyl cyclase.

### References:

1. Itoh, H, et al. (1988) Presence of three distinct molecular species of Gi protein alpha subunit. Structure of rat cDNAs and human genomic DNAs. *J. Biol. Chem.* 263:6656-64.
2. Blatt C. et al. (1988) Chromosomal localization of genes encoding guanine nucleotide-binding protein subunits in mouse and human. *PNAS* 85:7642-6
3. Lyons, J. et al. (1990) Two G protein oncogenes in human endocrine tumors. *Science* 249:655-9.

Torrey Pines Biolabs, Inc.  
9073 Knight Road  
Houston, TX 77054  
email: tpbi@chemokine.com

Tel: (713) 383-8144  
Toll-free: (866) 383-8144  
Fax: (713) 383-8142  
web: www.chemokine.com