

Purified Rabbit Anti-human $G\alpha_{16}$

Catalog Number: TP375

Lot Number: 062600

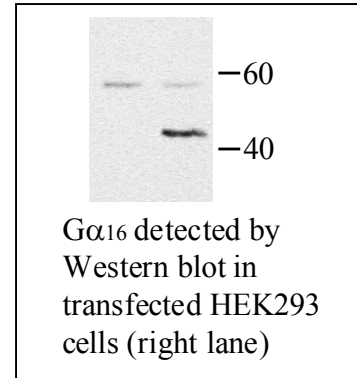
Content: Protein A purified rabbit IgG, 200 μ g, with 0.1% sodium azide, lyophilized.

(Reconstitute to 1 mg/ml by adding 200 μ l PBS)

Product Description and Usage: For research use only. This polyclonal antibody, which reacts with $G\alpha_{16}$, was generated using *E. coli*-expressed human $G\alpha_{16}$ (a.a. 237-373) as an immunogen. The tested titer for Western blot is 1:5,000. The Ab recognizes human $G\alpha_{16}$ and mouse $G\alpha_{15}$, but not other $G\alpha$ proteins. The Ab can be used for immunoprecipitation.

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

Background: $G\alpha_{16}$ is the only heterotrimeric G proteins with a restricted expression pattern in hematopoietic cells. Differentiation of promyelocytic cells leads to decreased expression of $G\alpha_{16}$. This G protein is known to couple a large number of G protein-coupled receptors to PLC- β and can lead to production of the secondary messengers



diacylglycerol and inositol phosphates. Targeted deletion of $G\alpha_{15}$, a mouse orthologue of human $G\alpha_{16}$, causes reduced C5a receptor signaling. $G\alpha_{16}$ serves as a marker, in addition to CD34, for hematopoietic progenitor cells.

References:

1. Amatruda, T.T. et al. (1991) G_{16} , a G protein alpha subunit specifically expressed in hematopoietic cells. *Proc. Natl. Acad. Sci. U.S.A.* 88:5587-5591.
2. Milligan, G., et al. (1996). G16 as a universal G protein adapter: Implications for agonist screening strategies. *Trends Pharmacol. Sci.* 17:235-237.
3. Pfeilstocker, M., et al., (2000). Hematopoietic recovery after IEV chemotherapy for malignant lymphoma followed by different cytokines can be monitored by analysis of $G\alpha_{16}$ and CD34. *Am. J. Hematol.* 64:156-160