

G_{sαL}

stimulatory heterotrimeric G-protein, long splice variant of the α-subunit
rat, recombinant, Sf9 insect cells

Cat. No.	Amount
PR-501	1 ml

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Membrane suspension. Supplied in 75 mM Tris-HCl
pH 7.4, 12.5 mM MgCl₂ and 1 mM EDTA.

Molecular Weight

52 kDa

Activation

Adenyl cyclase activation by GTPγS.

Description

G_{sαL} is the long splice variant of the α-subunit of stimulatory heterotrimeric G_s-proteins. It differs from the short splice variant (G_{sαS}) by 15-amino acid insert between the Ras-like domain and the α-helical domain. G_{sαL} activates adenylate cyclase (AC) and possesses a lower GDP-affinity than G_{sαS} (cat.# PR-505). These differences in GDP-affinity have important consequences for receptor/G-protein coupling and AC activation.

Selected References:

- Graziano *et al.* (1989) Expression of G_{sα} in Escherichia coli. Purification and properties of two forms of the protein. *J. Biol. Chem.* **264**:409.
- Gille *et al.* (2003) 2'-(3'-O-(N-Methylanthraniloyl))-substituted GTP Analogs: A Novel Class of Potent Competitive Adenylate Cyclase Inhibitors. *J. Biol. Chem.* **278**:12672.
- Gille *et al.* (2003) GDP Affinity and Order State of the catalytic Site Are Critical for Function of Xanthine Nucleotide-selective G_{sαS} Proteins. *J. Biol. Chem.* **278**:7822.

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Recombinant G-protein signaling reagents (including GAPs, GEFs, heterotrimeric G-proteins, and many more...)

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