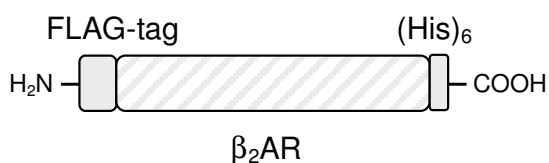


β_2 -AR + G_{s α L}
 β_2 -Adrenergic Receptor + G_{s α L}
human, recombinant, Sf9 insect cells

Cat. No.	Amount
PR-537	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 + 52 kDa

Activity

11.5 - 12.5 pmol/mg

Description

The β_2 -Adrenoceptor (β_2 AR) is activated by the catecholamine epinephrine and couples to the G-protein G_s to mediate adenylate cyclase (AC) activation.

β_2 ARs are found in numerous tissues and cell types including vascular and bronchial smooth muscle cells, leukocytes and liver.

β_2 ARs mediate smooth muscle relaxation, inhibition of leukocyte function and activation of glycogenolysis.

G_{s α L} is the long splice variant of the α -subunit of the heterotrimeric G-protein G_s. G_s activates the effector AC. G_{s α L} differs from the short splice variant (G_{s α S}) by a 15-amino acid insert between the ras-like domain and the α -helical domain. G_{s α L} (cat.# PR-501) possesses a lower GDP-affinity than G_{s α S} (cat.# PR-505).

Compared to a β_2 AR-G_{s α L} fusion protein, the coupling efficiency in a co-expression system consisting of the β_2 AR + G_{s α L} is lower, most prominently with respect to GTPase activity and [³⁵S]GTP γ S (cat.# NU-412) binding.

The β_2 AR contains a N-terminal FLAG-tag® and a C-terminal hexahistidine (His₆)-tag for immunochemical detection.

Selected References:

Seifert *et al.* (1998) Reconstitution of β_2 -adrenoceptor-GTP-bindingprotein interaction in Sf9 cells: High coupling efficiency in β_2 -adrenoceptor-G_{s α} fusion protein. *Eur. J. Biochem.* **255**:369.
 Gille *et al.* (2003) Co-expression of the β_2 -adrenoceptor and dopamine D₁-receptor with G_{s α} proteins in Sf9 insect cells: limitations in comparison with fusion proteins. *Biochim. Biophys. Acta* **1613**:101.