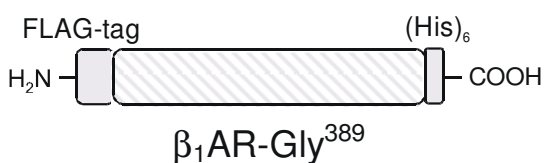


β_1 -AR-Gly³⁸⁹

β_1 -Adrenergic Receptor

human, recombinant, Sf9 insect cells

Cat. No.	Amount
PR-521	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

58 kDa

Activity

14 pmol/mg

Description

The human β_1 -adrenoreceptor (β_1 AR) is activated by the catecholamines epinephrine and norepinephrine and couples to the G-protein G_s to mediate adenylate cyclase activation. The β_1 AR exists as several polymorphic forms of which the Gly³⁸⁹ and Arg³⁸⁹ variants are among the best known. There is a controversy whether or not there are functional differences between the two β_1 AR polymorphisms.

β_1 ARs are mainly found in the heart, kidney, and fat tissue. These receptors are involved in physiological processes such as heart contraction, renin release and lipolysis.

The protein contains a N-terminal FLAG-tag® and a C-terminal hexahistidine (His₆)-tag for immunological detection, to allow purification, and to provide additional protection against proteolysis.

Selected References:

Wenzel-Seifert *et al.* (2002) Similarities and differences in the coupling of human β_1 - and β_2 -adrenoreceptors to G_{s α} splice variants. *Biochem. Pharmacol.* **64**:9.

Wenzel-Seifert *et al.* (2003) Properties of Arg389- β_1 -adrenoreceptor-G_{s α} fusion proteins: Comparison with Gly389- β_1 -adrenoreceptor-G_{s α} fusion proteins. *Receptors Channels* **9**:315.

Small *et al.* (2003) Pharmacology and physiology of human adrenergic receptor polymorphism. *Annu. Rev. Pharmacol. Toxicol.* **42**:381.