

# β1-Adrenergic Receptor Antibody

**Orders** ■ 877-616-CELL (2355)  
orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
info@cellsignal.com  
**Web** ■ www.cellsignal.com

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**For Research Use Only. Not For Use In Diagnostic Procedures.**

**Entrez-Gene ID** #153  
**Swiss-Prot Acc.** #P08588

Applications W Endogenous	Species Cross-Reactivity* H, M, R, (Mk)	Molecular Wt. 50-200 kDa	Source Rabbit**
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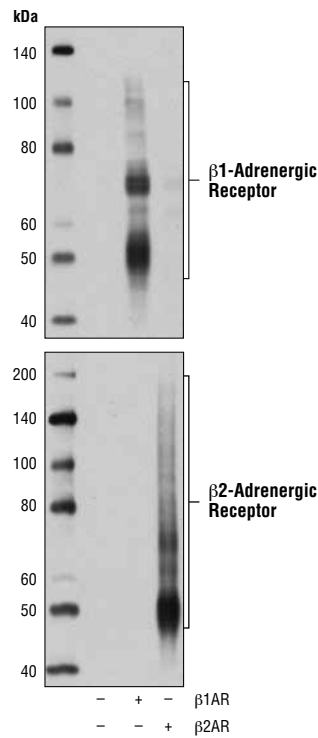
**Background:** β1-Adrenergic Receptor (β1AR) is a G protein-coupled receptor (GPCR) involved in the regulation of cardiovascular functions (1). Together with β2AR, β1AR is a major βAR in the heart. β1AR is activated by catecholamines and couples to Gα<sub>s</sub> protein, activating adenylate cyclase and increasing intracellular cAMP levels (2). Beta-blockers (βAR antagonists), one of the major class of therapeutics in cardiovascular medicine, act mostly by preventing catecholamine binding to β1AR (3).

**Specificity/Sensitivity:** β1-Adrenergic Receptor Antibody recognizes endogenous levels of total human β1-Adrenergic Receptor protein. This antibody does not cross-react with β2-Adrenergic Receptor.

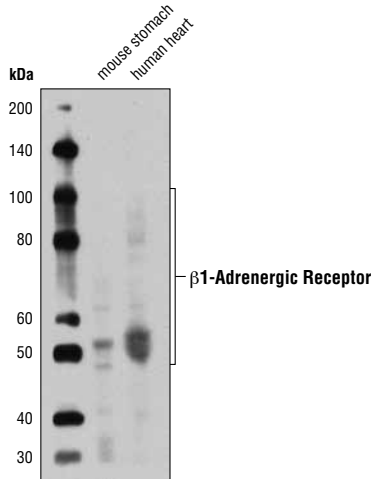
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly406 of human β1-Adrenergic Receptor protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

- (1) Brodde, O.E. and Michel, M.C. (1999) *Pharmacol Rev* 51, 651-90.
- (2) Rockman, H.A. et al. (2002) *Nature* 415, 206-12.
- (3) Frishman, W.H. *Am J Ther* 15, 565-76.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing full-length human β1-Adrenergic Receptor (β1AR; +) or full-length human β2-Adrenergic Receptor (β2AR; +), using β1-Adrenergic Receptor Antibody (upper) or β2-Adrenergic Receptor (D6H2) Rabbit mAb #8513 (lower).



◀ Western blot analysis of extracts from mouse stomach and human heart using β1-Adrenergic Receptor Antibody.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting 1:1000

For product specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended complementary products.

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.