β1-Adrenergic Receptor Antibody

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 Goα 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:

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.
Please visit 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.