

α_{1D} -AR (B-6): sc-365559

BACKGROUND

α_{1D} -adrenergic receptors (α_{1D} -ARs) couple to $G_{q/11}$ and participate directly in sympathetic regulation of systemic blood pressure by vasoconstriction. α_{1D} -AR can form hetero-oligomers with α_{1B} receptors. α_{1D} -AR transcripts are abundant in prostate and aorta. α_{1A} adrenergic receptors (α_{1A} -ARs) mediate actions in the sympathetic nervous system through the binding of the catecholamines, epinephrine and norepinephrine. α_{1A} -adrenergic receptors couple to $G_{q/11}$ and regulate blood pressure due to changes in vascular tone and cardiac output. Alternative splicing of this gene generates four isoforms with distinct C-termini, and the different expression profile of these subtypes produces distinct patterns of activation. α_{1A} -AR transcripts are abundant in heart, brain, liver, and prostate. α_{1A} -AR transcript sizes of 6.0, 4.0, 3.0, and 2.0 kb have been detected in liver. α_{1A} -AR transcript sizes of 6.0, 4.0 and 3.0 kb transcripts have been detected in heart, and 6.0 kb and 4.0 kb transcripts have been detected in prostate.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ADRA1D (human) mapping to 20p13.

SOURCE

α_{1D} -AR (B-6) is a mouse monoclonal antibody raised against amino acids 431-572 mapping at the C-terminus of α_{1D} -AR of human origin.

PRODUCT

Each vial contains 200 μ g IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

α_{1D} -AR (B-6) is recommended for detection of α_{1D} -AR of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for α_{1D} -AR siRNA (h): sc-29620, α_{1D} -AR shRNA Plasmid (h): sc-29620-SH and α_{1D} -AR shRNA (h) Lentiviral Particles: sc-29620-V.

Molecular Weight (predicted) of α_{1D} -AR: 60 kDa.

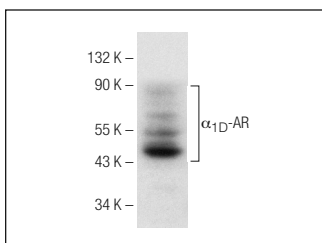
Molecular Weight (observed) of α_{1D} -AR: 47 kDa.

Positive Controls: A549 cell lysate: sc-2413, Hep G2 cell lysate: sc-2227 or HL-60 whole cell lysate: sc-2209.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



α_{1D} -AR (B-6): sc-365559. Western blot analysis of α_{1D} -AR expression in HL-60 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.