

# Arrestin-C (H-50): sc-67212

## BACKGROUND

Members of Arrestin/ $\beta$ -Arrestin protein family are thought to participate in agonist-mediated desensitization of G protein-coupled receptors and cause specific dampening of cellular responses to stimuli such as hormones, neurotransmitters or sensory signals. Arrestin-C, also known as retinal cone Arrestin-3, X-Arrestin or cArr, is a member of the Arrestin family of proteins. It is predominantly found in the retina and pineal gland and localizes to the inner and outer segments of red-, green- and blue-cone photoreceptors and the inner plexiform regions. Two Arrestin-C isoforms exist due to alternative splicing. Isoform 1 is the mature full length protein and isoform 2 is truncated, ending with an arginine for amino acid residue 359. Arrestin-C expression is stimulated by retinoic acid. It may play a role in retina-specific signal transduction and bind to photoactivated-phosphorylated red/green opsins. In addition, Arrestin-C forms homodimers and oligomers with  $\beta$ -Arrestins and may regulate  $\beta$ -Arrestin mediated signaling.

## REFERENCES

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- Fujimaki, T., et al. 2004. Truncation and mutagenesis analysis of the human X-Arrestin gene promoter. *Gene* 339: 139-147.
- van der Spuy, J., et al. 2005. Predominant rod photoreceptor degeneration in Leber congenital amaurosis. *Mol. Vis.* 11: 542-553.
- Macey, T.A., et al. 2005. Dopamine D1 receptor interaction with Arrestin-3 in neostriatal neurons. *J. Neurochem.* 93: 128-134.
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- Hanson, S.M., et al. 2006. The differential engagement of Arrestin surface charges by the various functional forms of the receptor. *J. Biol. Chem.* 281: 3458-3462.
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## CHROMOSOMAL LOCATION

Genetic locus: ARR3 (human) mapping to Xq13.1; Arr3 (mouse) mapping to X C3.

## SOURCE

Arrestin-C (H-50) is a rabbit polyclonal antibody raised against amino acids 231-280 mapping within an internal region of Arrestin-C of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Arrestin-C (H-50) is recommended for detection of Arrestin-C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Arrestin-C (H-50) is also recommended for detection of Arrestin-C in additional species, including equine and canine.

Suitable for use as control antibody for Arrestin-C siRNA (h): sc-61996, Arrestin-C siRNA (m): sc-61997, Arrestin-C shRNA Plasmid (h): sc-61996-SH, Arrestin-C shRNA Plasmid (m): sc-61997-SH, Arrestin-C shRNA (h) Lentiviral Particles: sc-61996-V and Arrestin-C shRNA (m) Lentiviral Particles: sc-61997-V.

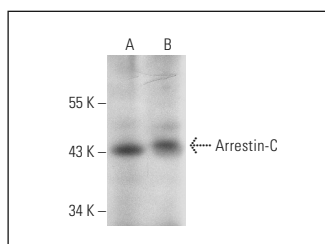
Molecular Weight of Arrestin-C: 43 kDa.

Positive Controls: mouse eye extract: sc-364241 or mouse brain extract: sc-2253.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Arrestin-C (H-50): sc-67212. Western blot analysis of Arrestin-C expression in mouse eye (A) and mouse brain (B) tissue extracts.

## 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.