

ARR3 Antibody

Catalog # ASC11747

Specification

ARR3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>P36575</u> <u>NP_004303</u>, <u>156071467</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 43 kDa

Observed: 47 kDa KDa ARR3 antibody can be used for detection of ARR3 by Western blot at 0.5 - 1 µg/ml.

Application Notes

ARR3 Antibody - Additional Information

Gene ID

407

Target/Specificity

ARR3; ARR3 antibody is human, mouse and rat reactive. At least three isoforms of ARR3 are known to exist. This antibody is predicted to not cross-react with other members of the arrestin protein family.

Reconstitution & Storage ARR3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions ARR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ARR3 Antibody - Protein Information

Name ARR3

Synonyms ARRX, CAR

Function

May play a role in an as yet undefined retina-specific signal transduction. Could bind to photoactivated-phosphorylated red/green opsins.

Cellular Location Photoreceptor inner segment {ECO:0000250|UniProtKB:Q9EQP6}. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:Q9EQP6}

Tissue Location

Inner and outer segments, and the inner plexiform regions of the retina



ARR3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ARR3 Antibody - Images



Western blot analysis of ARR3 in EL4 cell lysate with ARR3 antibody at (A) 0.5 and (B) 1 μ g/ml.

ARR3 Antibody - Background

Arrestin 3 (ARR3) belongs to the Arrestin family of proteins that function as negative regulators of G protein-coupled receptor (GPCR) signaling (1,2). ARR3 binds the c-Jun N-terminal kinase 3 (JNK3) and scaffolds the apoptosis signal-regulating kinase 1 (ASK1)-MAPK kinase4-JNK3 cascade in a receptor-independent fashion, promoting JNK3 phosphorylation (3,4). ARR3 also mediates the internalization of the C-C chemokine receptor CCR7 upon the binding of its ligand CCL19, but not CCL21, suggesting that it helps mediate CCR7 receptor desensitization (5).

ARR3 Antibody - References

Murakami A, Yajima T, Sakuma H, et al. X-arrestin: a new retinal arrestin mapping to the X chromosome. FEBS Lett. 1993; 334:203-9.

Gurevich VV and Gurevich EV. The structural basis of arrestin-mediated regulation of G-protein-coupled receptors. Pharmacol. Ther. 2006; 110:465-502.

Song X, Coffa S, Fu H, et al. How does arrestin assemble MAPKs into a signaling complex? J. Biol. Chem. 2009; 284:685-95.

Seo J, Tsakem EL, Breitman M, et al. Identification of arrestin-3-specific residues necessary for JNK3 kinase activation. J. Biol. Chem. 2011; 286:27894-901.