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ARR3 Antibody

Catalog # ASC11747

Product Information

Application	WB, E
Primary Accession	P36575
Other Accession	NP_004303, 156071467
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	42778
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ARR3 antibody can be used for detection of ARR3 by Western blot at 0.5 - 1 g/ml.

Additional Information

Gene ID	407
Other Names	Arrestin-C, Cone arrestin, C-arrestin, cArr, Retinal cone arrestin-3, X-arrestin, ARR3, ARRX, CAR
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℃ for three months and -20℃, stable for up to one year.
Precautions	ARR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

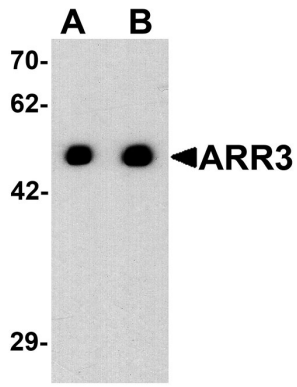
Background

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).

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.

Images



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