Revision 3

Store at -20C

#3857

β-Arrestin 2 (C16D9) Rabbit mAb

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IHC-P	H M R Mk	Endogenous	50	Rabbit	#P32121	409

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:50 - 1:200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #87594.

Specificity/Sensitivity

β-Arrestin 2 (C16D9) Rabbit mAb detects endogenous levels of total β-arrestin 2 protein. It does not recognize transfected human β-arrestin 1.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant human β-arrestin 2.

Background

Arrestin proteins function as negative regulators of G protein-coupled receptor (GPCR) signaling. Cognate ligand binding stimulates GPCR phosphorylation, which is followed by binding of arrestin to the phosphorylated GPCR and the eventual internalization of the receptor and desensitization of GPCR signaling (1). Four distinct mammalian arrestin proteins are known. Arrestin 1 (also known as S-arrestin) and arrestin 4 (X-arrestin) are localized to retinal rods and cones, respectively. Arrestin 2 (also known as β-arrestin 1) and arrestin 3 (β-arrestin 2) are ubiquitously expressed and bind to most GPCRs (2). β-arrestins function as adaptor and scaffold proteins and play important roles in other processes, such as recruiting c-Src family proteins to GPCRs in Erk activation pathways (3,4). β-arrestins are also involved in some receptor tyrosine kinase signaling pathways (5-8). Additional evidence suggests that β-arrestins translocate to the nucleus and help regulate transcription by binding transcriptional cofactors (9,10).

Background References

1. Shenoy, S.K. and Lefkowitz, R.J. (2005) *Sci STKE* 2005, cm10.
2. Lefkowitz, R.J. and Shenoy, S.K. (2005) *Science* 308, 512-7.
3. Luttrell, L.M. et al. (1999) *Science* 283, 655-61.
4. Luttrell, L.M. et al. (1999) *Curr Opin Cell Biol* 11, 177-83.
5. Luttrell, L.M. and Lefkowitz, R.J. (2002) *J Cell Sci* 115, 455-65.
6. Waters, C. et al. (2004) *Semin Cell Dev Biol* 15, 309-23.
7. Lefkowitz, R.J. and Whalen, E.J. (2004) *Curr Opin Cell Biol* 16, 162-8.
8. Waters, C.M. et al. (2005) *Cell Signal* 17, 263-77.
9. Kang, J. et al. (2005) *Cell* 123, 833-47.
10. Ma, L. and Pei, G. (2007) *J Cell Sci* 120, 213-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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Limited Uses

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