

#3857 Store at -20°C

β-Arrestin 2 (C16D9) Rabbit mAb



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rev. 03/08/19

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Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IHC-P Endogenous	H, M, R, Mk	50 kDa	Rabbit IgG**

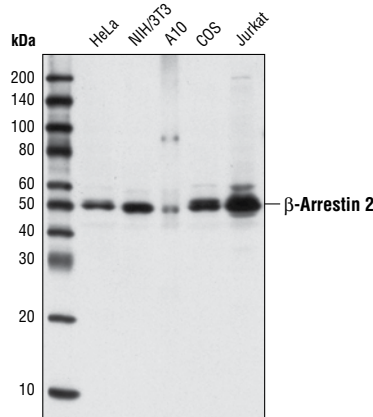
Background: Arrestin proteins function as negative regulators of G protein coupled receptor (GPCR) signaling. Cognate ligand binding stimulates GPCR phosphorylation, which is followed by binding of arrestin to the phosphorylated GPCR and the eventual internalization of the receptor and desensitization of GPCR signaling (1). Four distinct mammalian arrestin proteins are known. Arrestin 1 (also known as S-arrestin) and arrestin 4 (or X-arrestin) are localized to retinal rods and cones, respectively. Arrestin 2 (also known as β-arrestin 1) and arrestin 3 (or β-arrestin 2) are ubiquitously expressed and bind to most GPCRs (2). β-arrestin proteins function as adapters 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-arrestin proteins translocate to the nucleus and help regulate transcription by binding transcriptional cofactors (9,10).

Specificity/Sensitivity: β-Arrestin 2 (C16D9) Rabbit mAb detects endogenous levels of total β-arrestin 2 protein.

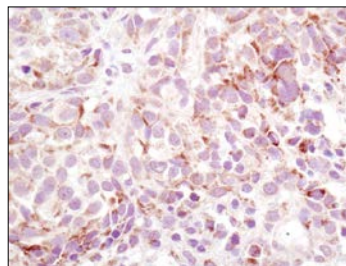
Source/Purification: Monoclonal antibody is produced by immunizing animals with recombinant human β-arrestin 2.

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.



Western blot analysis of extracts from various cell lines using β-Arrestin 2 (C16D9) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human melanoma using β-Arrestin 2 (C16D9) Rabbit mAb.

Entrez-Gene ID #409
UniProt ID #P32121

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.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting 1:1000
 Immunohistochemistry (Paraffin) 1:50-1:200
Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.
 Unmasking buffer: Citrate
 Antibody diluent: SignalStain® Antibody Diluent #8112
 Detection reagent: SignalStain® Boost (HRP, Rabbit) #8114

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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