[KD Validated] Anti-Phospho-beta Arrestin 1 (Ser412) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021443

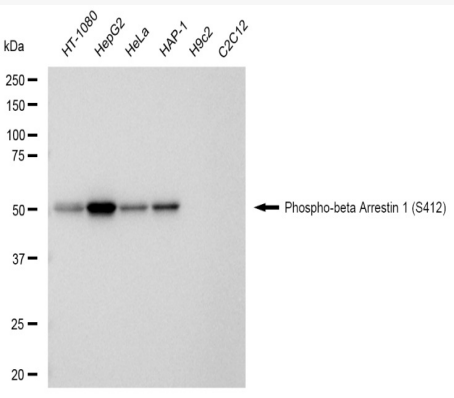
Product Information

Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	68E83A40
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Phospho-beta Arrestin 1 (Ser412)
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-Phospho-beta Arrestin 1 (Ser412) Rabbit mAb [68E83A40] is for research use only and not for use in diagnostic or therapeutic procedures.

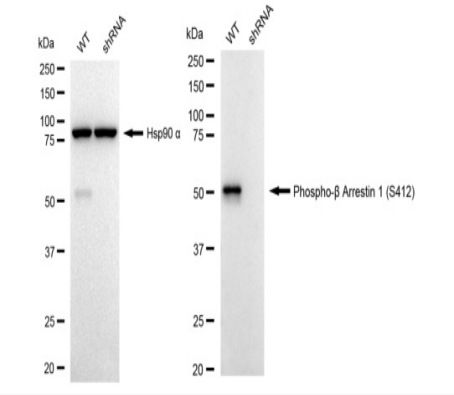
Protein Information

Synonyms	ARRB1; Arrestin Beta 1; ARR1; Non-Visual Arrestin-2; Beta-Arrestin-1; Arrestin 2; Arrestin, Beta 1; Arrestin Beta-1; ARB1.
Calculated MW	Calculated MW: 47 kDa, Observed MW: 50 kDa
Uniprot ID	P49407
Gene ID	408
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 beta 1 is a cytosolic protein and acts as a cofactor in the beta-adrenergic receptor kinase (BARK) mediated desensitization of beta-adrenergic receptors. Besides the central nervous system, it is expressed at high levels in peripheral blood leukocytes, and thus the BARK/beta-arrestin system is believed to play a major role in regulating receptor-mediated immune functions. Alternatively spliced transcripts encoding different isoforms of arrestin beta 1 have been described. [provided by RefSeq, Jan 2011]
Cellular Location	Cytoplasm Nucleus Cell membrane Membrane Clathrin-coated pit Cell projection Pseudopodium Cytoplasmic vesicle Translocates to the plasma membrane and colocalizes with antagonist-stimulated GPCRs. The monomeric form is predominantly located in the nucleus. The oligomeric form is located in the cytoplasm. Translocates to the nucleus upon stimulation of OPRD1 (By similarity).

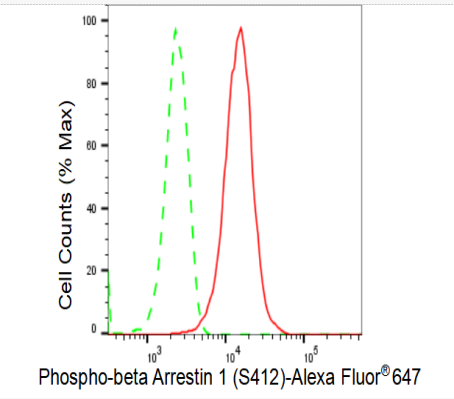
Validation Images



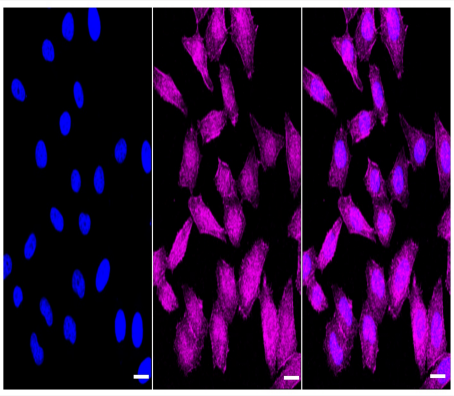
Western blotting analysis using Phospho-beta Arrestin 1 (S412) antibody (R021443). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Phospho-beta Arrestin 1 (S412) antibody (R021443, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



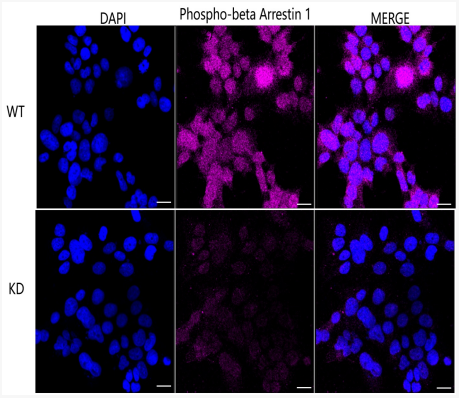
Western blotting analysis using Phospho-beta Arrestin 1 (S412) antibody (R021443). Phospho-beta Arrestin 1 (S412) expression in wild type (WT) and Phospho-beta Arrestin 1 (S412) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Phospho-beta Arrestin 1 (S412) antibody (R021443, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



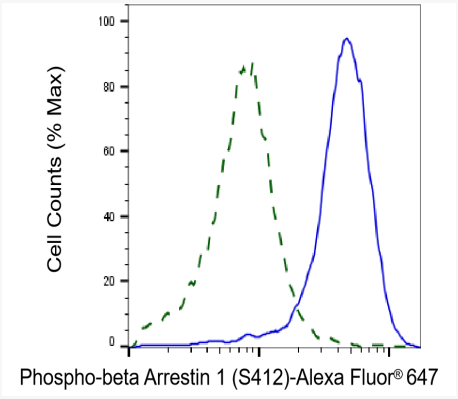
Flow cytometric analysis of Phospho-beta Arrestin 1 (S412) expression in HepG2 cells using Phospho-beta Arrestin 1 (S412) antibody (R021443, 1:2,000). Green, isotype control; red, Phospho-beta Arrestin 1 (S412).



Immunocytochemical staining of HepG2 cells with Phospho-beta Arrestin 1 (S412) antibody (R021443, 1:1,000). Nuclei were stained blue with DAPI; Phospho-beta Arrestin 1 (S412) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Immunocytochemical staining of HeLa cells using Phospho-beta Arrestin 1 (S412) antibody (R021443, 1:1,000), Top panel: wild-type (WT); Bottom panal: Phospho-beta Arrestin 1 (S412) shRNA knockdown (KD). Nuclei were stained blue with DAPI; Phospho-beta Arrestin 1 (S412) was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of beta Arrestin 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Phospho-beta Arrestin 1 (S412) antibody (R021443, 1:2,000) and analyzed using BD flow cytometer.