Technical Data Sheet

# Purified Mouse Anti-β-Arrestin

## Product Information

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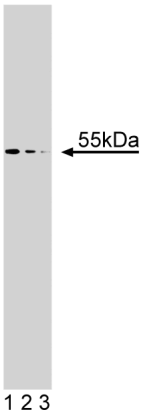
|---|---|
| **Material Number:** | **610551** |
| **Size:** | 150 µg |
| **Concentration:** | 250 µg/ml |
| **Clone:** | 10/Beta-Arrestin1 |
| **Immunogen:** | Rat β-Arrestin1 aa. 262-409 |
| **Isotype:** | Mouse IgG1 |
| **Reactivity:** | QC Testing: Mouse<br>Tested in Development: Human, Rat |
| **Target MW:** | 55 kDa |
| **Storage Buffer:** | Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide. |

## Description

β-Arrestins were discovered due to their ability to modulate interactions between the phosphorylated β2-Adrenergic receptors and G proteins. This modulation results in diminished β2-Adrenergic receptor function, also known as desensitization. Because arrestins are found at the synaptic terminals, they may provide a termination mechanism that allows the neurons to regain their original polarization and respond to a new neurotransmitter stimulus. The C-terminal region of arrestins is involved in selecting the phosphorylated and activated adrenergic receptors. The β-Arrestin1 gene encodes a protein of 418 amino acids with an approximate molecular weight of 55kDa. β-Arrestin1 protein is highly homologous to the 45kDa β-Arrestin2. Both proteins are widely expressed, but are especially abundant in the central nervous system.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.




***Western blot analysis of β-Arrestin on a mouse macrophage lysate.*** *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the anti- β-Arrestin antibody.*

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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## Application Notes

**Application**

| | |
|---|---|
| Western blot | Routinely Tested |
| Immunofluorescence | Reported |
| Immunohistochemistry | Not Recommended |
| Immunoprecipitation | Not Recommended |

## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 611479 | Mouse Macrophage Lysate | 500 µg | (none) |
| 554002 | HRP Goat Anti-Mouse Igs | 1.0 ml | (none) |

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References


Attramadal H, Arriza JL, Aoki C, et al. Beta-arrestin2, a novel member of the arrestin/beta-arrestin gene family. *J Biol Chem.* 1992; 267(25):17882-17890.(Biology)

Dalle S, Imamura T, Rose DW, et al. Insulin induces heterologous desensitization of G-protein-coupled receptor and insulin-like growth factor I signaling by downregulating beta-arrestin-1. *Mol Cell Biol.* 2002; 22(17):6272-6285.(Clone-specific: Immunoprecipitation, Western blot)

DeFea KA, Zalevsky J, Thoma MS, Dery O, Mullins RD, Bunnett NW. beta-arrestin-dependent endocytosis of proteinase-activated receptor 2 is required for intracellular targeting of activated ERK1/2. *J Cell Biol.* 2000; 148(6):1267-1281.(Clone-specific: Immunofluorescence, Immunoprecipitation, Western blot)

Gurevich VV, Dion SB, Onorato JJ, et al. Arrestin interactions with G protein-coupled receptors. Direct binding studies of wild type and mutant arrestins with rhodopsin, beta 2-adrenergic, and m2 muscarinic cholinergic receptors. *J Biol Chem.* 1995; 270(2):720-731.(Biology)

Imamura T, Huang J, Dalle S, et al. beta -Arrestin-mediated recruitment of the Src family kinase Yes mediates endothelin-1-stimulated glucose transport. *J Biol Chem.* 2001; 276(47):43663-43667.(Clone-specific: Immunofluorescence, Immunoprecipitation, Western blot)