Technical Data Sheet

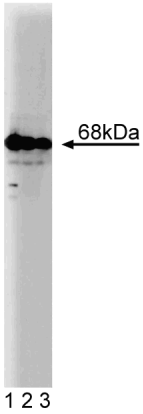
Purified Mouse Anti-Human G3BP

Product Information

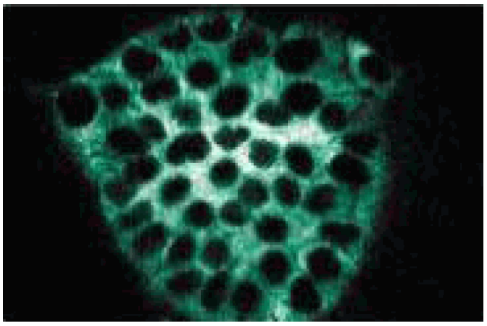
Material Number:	**611126**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	23/G3BP
Immunogen:	Human G3BP aa. 210-323
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	55-70 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The Ras proteins are low molecular weight GTPases that play a critical role in the control of proliferation, differentiation, and cytoskeletal organization. RasGAP acts as a negative regulator of Ras, as well as a downstream target of Ras. It participates in the signal transduction cascade through interactions with other signaling proteins. Via its C-terminal domain, RasGAP interacts with Ras, but the N-terminus interacts with other signaling molecules such as p62 and p190. This function of RasGAP is mediated by the presence of SH2, SH3, and PH domains in the N-terminal region. However, some signaling proteins cannot bind to these domains. In an attempt to identify RasGAP-interacting molecules, a GAP SH3-Binding Protein (G3BP) was identified. This protein exhibits sequence homology to the hnRNP superfamily. It contains RNP1 and RNP2 motifs and is found primarily in the cytosol. G3BP interacts with GAP in proliferating cells and is dependent on the activation state of Ras. In addition, G3BP contains an intrinsic endonuclease activity that cleaves 3'-untranslated region (3'-UTR) mRNA. These data indicate that G3BP may link the Ras pathway to mRNA degradation.



Western blot analysis of G3BP on a SW-13 cell lysate (Human adrenal gland carcinoma; ATCC CCL-105). *Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti-human G3BP antibody. G3BP may be observed migrating in a range of 55-70 kDa.*



Immunofluorescence staining of A431 cells (Human epithelial carcinoma; ATCC CRL-1555).

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611475	SW-13 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Gallouzi IE, Parker F, Chebli K, et al. A novel phosphorylation-dependent RNase activity of GAP-SH3 binding protein: a potential link between signal transduction and RNA stability. *Mol Cell Biol.* 1998; 18(7):3956-3965.(Biology)

Parker F, Maurier F, Delumeau I, et al. A Ras-GTPase-activating protein SH3-domain-binding protein. *Mol Cell Biol.* 1996; 16(6):2561-2569.(Biology)