Technical Data Sheet

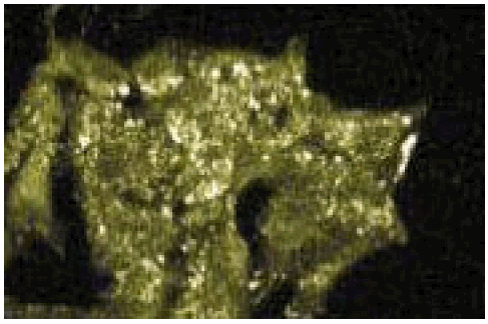
FITC Mouse Anti-p21-Arc

Product Information

Material Number:	**612236**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	26/p21-Arc
Immunogen:	Human p21-Arc aa. 10-118
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Chicken, Dog, Mouse, Rat
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Cellular morphology, adhesion, and motility occur through the reorganization of the actin cytoskeleton. This reorganization of actin filaments occurs through the interactions between actin and actin binding proteins. Actin-binding proteins regulate the polymerization and depolymerization of actin, connect actin-based structures to membranes and to other cytoskeletal elements, power the movement of actin filaments, and cross-link actin filaments into bundles. Actin related proteins (Arp) 2/3 complex is an actin polymerization inducing complex that includes Arp2, Arp3, p41-Arc, p34-Arc, p21-Arc, p20 Arc, and p16-Arc. The Arp2 and Arp3 subunits may nucleate actin polymerization, while the p41-Arc subunit is a WD repeat-containing protein that may regulate both the activity and localization of the Arp2/3 complex. Arp3, p34-Arc, and p21-Arc are localized to the lamellipodia of stationary and locomoting fibroblasts. Both WASP and Abp1p are acidic sequence-containing proteins that activate the Arp2/3 complex. However, WASP binds actin monomers, while the endocytosis-related Abp1p protein binds actin filaments. Thus, Arp2/3 complex may regulate actin polymerization in specific cell locations through interaction with actin binding Arp2/3 activators.



Immunofluorescent staining of HeLa cells with anti-p21-Arc antibody.

Preparation and Storage

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

Application Notes

Application

Immunofluorescence	Routinely Tested

Recommended Assay Procedure:
For use in Western blotting, the unconjugated, purified format, Cat. No. 612234 is recommended

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.

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References

Welch MD, DePace AH, Verma S, Iwamatsu A, Mitchison TJ. The human Arp2/3 complex is composed of evolutionarily conserved subunits and is localized to cellular regions of dynamic actin filament assembly. *J Cell Biol.* 1997; 138(2):375-384.(Biology)

Zhao X, Yang Z, Qian M, Zhu X. Interactions among subunits of human Arp2/3 complex: p20-Arc as the hub. *Biochem Biophys Res Commun.* 2001; 280(2):513-517.(Biology)