Technical Data Sheet

Purified Mouse Anti-Fibronectin

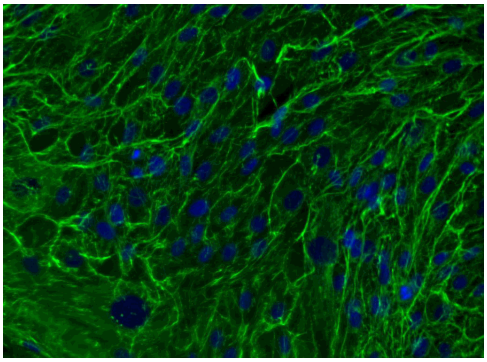
Product Information

Material Number:	**610078**
Alternate Name:	FN; LETS
Size:	150 µg
Concentration:	250 µg/ml
Clone:	10/Fibronectin
Immunogen:	Human Fibronectin
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human Tested During Development: Cow, Chicken, Dog, Human, Mouse, Rat
Target MW:	240 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The 240 kDa dimeric fibronectin protein exists in two forms: a soluble protomer in body fluids and an insoluble multimer in the extracellular matrix. The latter is the primary functional form and creates a substrate for cell migration, a role which makes fibronectin vital to embryogenesis and wound response. Fibronectin mediates cytoskeletal organization, cell attachment, and cellular signaling through interactions with cellular receptors. Although various isoforms of fibronectin are derived by alternative splicing, they share a common N-terminus which is a critical region for cell surface binding in an initial step of multimer assembly. Further polymerization steps are regulated by fibronectin/integrin interactions and result in generation of the complex fibrils that constitute the fibronectin matrix.

Western blot analysis of Fibronectin. *A-431 (ATCC CRL-1555) cell lysate was blotted at the follwing dilutions: Lane 1: 1:5000, Lane 2: 1:10,000, Lane 3: 1:20,000.*



Immunofluorescent analysis of Fibronectin in mesenchymal stem cells (MSC). *MSC (Lonza), passage 6, grown in BD Mosaic™ hMSC Serum Free Cell Culture Environment (Cat. No. 355700), were fixed in BD Cytofix™ Fixation Buffer (Cat. No. 554655), permeabilized with 0.1% Triton™ X-100 and stained with mouse anti-Fibronectin monoclonal antibody (Cat. No.610077, pseudo-colored green) at 2.5 µg/ml. Counter-staining of cell nuclei was with DAPI (pseudo-colored blue). The images were captured on a BD Pathway™ 435 Cell Analyzer and merged using BD Attovision™Software.*

Preparation and Storage

Store undiluted at -20°C.

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

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Tested During Development

Suggested Companion Products

Catalog Number	Name	Size	Clone
611447	A431 Cell Lysate	500 µg	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554655	Fixation Buffer	100 ml	(none)
355700	BD Mosaic hMSC Serum Free Cell Culture Environment	80 tests	(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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

Chen H, Mosher DF. Formation of sodium dodecyl sulfate-stable fibronectin multimers. Failure to detect products of thiol-disulfide exchange in cyanogen bromide or limited acid digests of stabilized matrix fibronectin. *J Biol Chem.* 1996; 271(15):9084-9089. (Biology)

Danen EH, Sonneveld P, Brakebusch C, Fassler R, Sonnenberg A. The fibronectin-binding integrins alpha5beta1 and alphavbeta3 differentially modulate RhoA-GTP loading, organization of cell matrix adhesions, and fibronectin fibrillogenesis. *J Cell Biol.* 2002; 159(6):1071-1086. (Clone-specific: Immunofluorescence)

Rhee CS, Sen M, Lu D, et al. Wnt and frizzled receptors as potential targets for immunotherapy in head and neck squamous cell carcinomas. *Oncogene.* 2002; 21(42):6598-6605. (Clone-specific: Western blot)

Sechler JL, Takada Y, Schwarzbauer JE. Altered rate of fibronectin matrix assembly by deletion of the first type III repeats. *J Cell Biol.* 1996; 134(2):573-583. (Biology)

Zuk A, Bonventre JV, Brown D, Matlin KS. Polarity, integrin, and extracellular matrix dynamics in the postischemic rat kidney. *Am J Physiol.* 1998; 275(3):C711-C731. (Clone-specific: Immunohistochemistry)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit **bdbiosciences.com/contact**