Technical Data Sheet

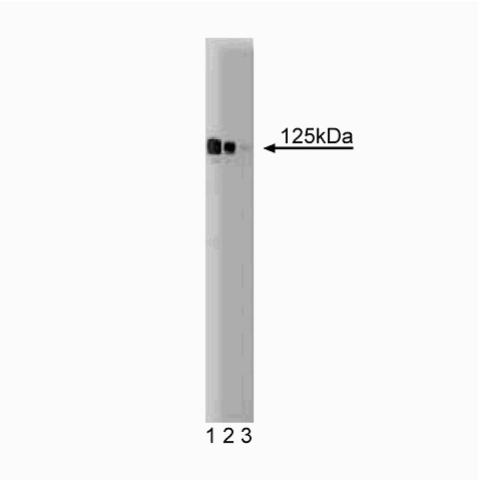
Purified Mouse Anti-BM28

Product Information

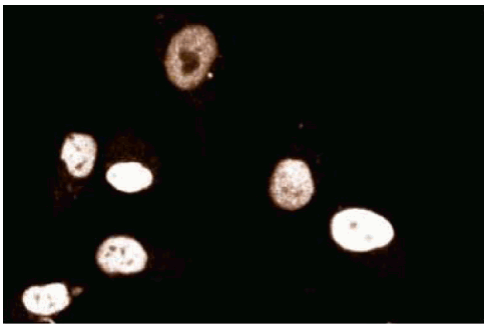
Material Number:	**610700**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	46/BM28
Immunogen:	Human BM28 aa. 725-888
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Chicken, Dog, Mouse, Rat
Target MW:	125 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

BM28 is a phosphoprotein that migrates at 125kDa in SDS PAGE with a hyperphosphorylated form migrating as a slightly slower band. The ratio of the phosphorylation states alters with the phases of cell cycle - in M, the "fast" phosphorylated BM28 is the major form found, while in G1 phase, the "slow", hyperphosphorylated BM28 predominates. The cellular localization of BM28 is also cell cycle dependent. In G1, most of the BM28 is chromatin bound, whereas, by M phase, the BM28 is still nuclear, but not associated with the DNA. BM28 is necessary for both entry into S phase and cell division as determined by microinjection inhibition experiments. Microinjection of a BM28 antibody into synchronised cells in G1 phase inhibits DNA replication. When injected during S phase or later, no effect on DNA replication is seen, but cell division is inhibited.



Western blot analysis of BM28 on human endothelial cell lysate. *Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of anti-BM28 antibody.*



Immunofluorescent staining of Human Endothelial cells.

Preparation and Storage

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

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/**

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Tested During Development
Immunohistochemistry	Not Recommended

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
611450	Human Endothelial 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. 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

Cook JG, Park CH, Burke TW, et al. Analysis of Cdc6 function in the assembly of mammalian prereplication complexes. *Proc Natl Acad Sci U S A.* 2002; 99(3):1347-1352.(Clone-specific: Western blot)

Ishimi Y, Ichinose S, Omori A, Sato K, Kimura H. Binding of human minichromosome maintenance proteins with histone H3. *J Biol Chem.* 1996; 271(39):24115-24122.(Biology)

Shreeram S, Sparks A, Lane DP, Blow JJ. Cell type-specific responses of human cells to inhibition of replication licensing. *Oncogene.* 2002; 21(43):6624-6632. (Clone-specific: Western blot)

Todorov IT, Attaran A, Kearsey SE. BM28, a human member of the MCM2-3-5 family, is displaced from chromatin during DNA replication. *J Cell Biol.* 1995; 129(6):1433-1445.(Biology)

Todorov IT, Pepperkok R, Philipova RN, Kearsey SE, Ansorge W, Werner D. A human nuclear protein with sequence homology to a family of early S phase proteins is required for entry into S phase and for cell division. *J Cell Sci.* 1994; 107(1):253-265.(Biology)