Technical Data Sheet

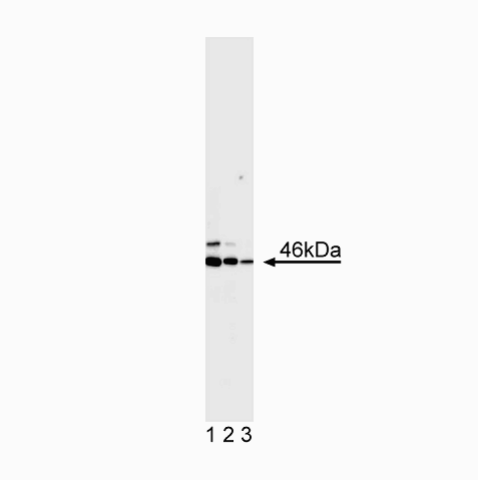
Purified Mouse Anti-Human JNK1 with Control

Product Information

Material Number:	**551197**
Size:	150 µg
Reactivity:	QC Testing: Human
Component:	**51-1570GR**
Description:	Purified Mouse Anti-Human JNK1
Size:	50 µg (3 ea)
Clone Name:	G151-333
Immunogen:	Human JNK1 fusion protein
Isotype:	Mouse IgG1
Target MW:	46 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Component:	**51-16516N**
Description:	HeLa Control Lysate
Size:	50 µg (1 ea)
Concentration:	1.0 mg/ml
Storage Buffer:	SDS-PAGE buffer (62mM Tris pH 6.8, 2% SDS, 0.9% b-mercaptoethanol, 0.003% bromophenol blue, 5% glycerol)

Description

C-Jun NH2-terminal kinase (JNK1) binds to the c-Jun terminal transactivation domain and phosphorylates it on Ser-63 and Ser-73. Phosphorylation enhances the transcriptional activity of c-Jun. The Ser-Pro-acidic sequence targeted by JNK1 kinase activity establishes it as a proline-directed kinase related to the MAP kinases and cyclin dependent kinases. JNK1 migrates with an apparent molecular weight of 46 kDa by SDS-PAGE. A related protein of 55 kDa has similar kinase activity. JNK1 may act as a tumor promoter in response to UV-irradiation since its activity is potently stimulated by such radiation. This has relevance to the observations that c-Jun transcriptional activity is upregulated by UV irradiation. The G151-333 antibody recognizes both the 46 kDa JNK1 and a related ~55 kDa protein (which may be a modified form of JNK1). It does not cross-react with JNK2. G151-333 precipitates an active kinase. A bacterially expressed fusion protein of human JNK1 was used as immunogen.



Western blot analysis of JNK1. *Lysate from HeLa cells was probed with anti-JNK1 (clone G151-333, Component No. 51-1570GR) at concentrations of 1.0 (lane 1), 0.5 (lane 2), and 0.25 µg/ml (lane 3). The antibody recognizes JNK1 as a 46 kDa band as well as a putative modified form of JNK1 at ~55 kDa.*

Preparation and Storage

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

BD Biosciences

www.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 **www.bdbiosciences.com/how_to_order/**

Application Notes

Application

Western blot	Routinely Tested
In vitro kinase assay	Reported
Immunoprecipitation	Reported

Recommended Assay Procedure:

Applications include western blot analysis (0.25-1.0 µg/ml). Other applications not routinely tested at BD Biosciences Pharmingen include immunoprecipitation (1-2 µg/1x10e6 cells). HeLa control lysate [50 µg (1 µg/µl)] is provided as a western blot positive control (Component No. 51-16516N; store lysate at -20°C). Additional control lysate (Cat. No. 611449) is sold separately.

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

Adler V, Fuchs SY, Kim J. jun-NH2-terminal kinase activation mediated by UV-induced DNA lesions in melanoma and fibroblast cells. *Cell Growth Differ.* 1995; 6(11):1437-1446.(Clone-specific: Immunoprecipitation, In vitro kinase assay)

Adler V, Pincus MR, Brandt-Rauf PW, Ronai Z. Complexes of p21RAS with JUN N-terminal kinase and JUN proteins. *Proc Natl Acad Sci U S A.* 1995; 92(23):10585-10589.(Clone-specific: Immunoprecipitation, In vitro kinase assay)

Adler V, Schaffer A, Kim J, Dolan L, Ronai Z. UV irradiation and heat shock mediate JNK activation via alternate pathways. *J Biol Chem.* 1995; 270(44):26071-26077.(Clone-specific: Immunoprecipitation, In vitro kinase assay)

Dérijard B, Hibi M, Wu IH. JNK1: a protein kinase stimulated by UV light and Ha-Ras that binds and phosphorylates the c-Jun activation domain. *Cell.* 1994; 76(6):1025-1037.(Biology)

Devary Y, Rosette C, DiDonato JA, Karin M. NF-kappa B activation by ultraviolet light not dependent on a nuclear signal. *Science.* 1993; 261(5127):1442-1445. (Biology)

Hibi M, Lin A, Smeal T, Minden A, Karin M. Identification of an oncoprotein- and UV-responsive protein kinase that binds and potentiates the c-Jun activation domain. *Genes Dev.* 1993; 7(11):2135-2148.(Biology)

Liu ZG, Hsu H, Goeddel DV, Karin M. Dissection of TNF receptor 1 effector functions: JNK activation is not linked to apoptosis while NF-kappaB activation prevents cell death. *Cell.* 1996; 87(3):565-576.(Clone-specific: Immunoprecipitation, In vitro kinase assay)