Technical Data Sheet

Purified Mouse Anti-Human c-IAP-2

Product Information

Material Number: 552783 Size: 150 ug

QC Testing: Human Reactivity:

51-9000062 Component:

Purified Mouse Anti-Human c-IAP-2 **Description:**

Size: 50 μg (3 ea) **Concentration:** 0.25 mg/ml Clone Name: F30-2285 Immunogen: Human c-IAP-2 Isotype: Mouse IgG1. κ

Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium

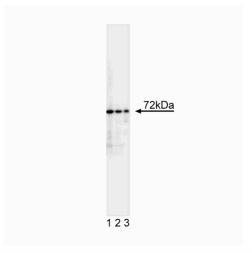
51-16526N Component: **Description:** Jurkat Cell Lysate 50 μg (1 ea) Size: Concentration: 1.0 mg/ml

Storage Buffer: SDS-PAGE buffer (62mM Tris pH 6.8, 2% SDS, 0.9% b-mercaptoethanol,

0.003% bromophenol blue, 5% glycerol)

Description

Programmed cell death is a normal physiologic process required for maintenance as well as for development in multi-cellular organisms. It is important for apoptosis to be tightly controlled because dysregulation of cell death pathways can lead to pathogenesis. One group of proteins which aids in the regulation of the apoptotic process is called inhibitors of apoptosis (IAPs). This group of proteins acts by directly inhibiting a class of proteins known as the executioners of apoptosis, the caspases. Caspases are inactive cytosolic proteases that upon activation can cause the demise of the cell. IAPs directly inhibit apoptosis by physically interacting with and blocking caspase activity. The first human IAP to be identified, NAIP, was discovered based on its association with a neurodegenerative disorder. Subsequently, six additional human IAPs have been identified, including survivin, XIAP, c-IAP-1, c-IAP-2, BRUCE, and pIAP. These proteins share sequence motifs including a RING zinc finger domain as well two to three copies of an ~65 amino acid baculovirus IAP repeat (BIR) domain. BIR regions promote protein-protein interaction(s) with caspases and are required for inhibition of caspase activity and apoptosis. While the RING zinc finger regions are not required for this function, they have been found to enhance the caspase inhibitory action of IAPs. Each of these inhibitors displays some specificity with regard to their ability to bind and inhibit caspases. c-IAP-1, c-IAP-2 and XIAP have been shown to block the activity of caspases-3 and -7, while NAIP does not. Thus, IAPs provide a central role in regulation of apoptosis, while subtle differences between the IAPs may confer specificity in the regulation of the various caspases. c-IAP-1 has a molecular weight of ~72 kDa in SDS/PAGE. The antibody recognizes human c-IAP-2. Recombinant human c-IAP-2 expressed in E. coli was used as an immunogen.



Western blot analysis of c-IAP-2. Jurkat cell lysate was probed with anti-c-IAP-2 (clone F30-2285, component 51-9000062) at concentrations of 4.0 (lane 1), 2.0 (lane 2), and 1.0 μg/ml (lane 3). c-IAP-2 is identified as a band of ~72

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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

Western blot	Routinely Tested
Immunoprecipitation	Tested During Development

Recommended Assay Procedure:

Applications include western blot analysis (1.0-4.0 μ g/ml). Jurkat control lysate [50 μ g (1 μ g/ μ l)] is provided as a western blot positive control (Cat. No. 51-16526N; store lysate at -20°C). Additional control lysate (Cat. No. 611451) is also sold seperately. Additional applications not routinely tested at BD Biosciences Pharmingen include immunoprecipitation (2 μ g of antibody/200 μ g of lysate).

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611451	Jurkat Cell Lysate	500 μg	(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. This product is sold under license from Aegera Therapeutics, Inc.
- 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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Deveraux QL, Reed JC. IAP family proteins--suppressors of apoptosis. *EMBO J.* 1999; 13(3):239-252.(Biology)

Goyal L. Cell death inhibition: keeping caspases in check. Cell. 2001; 104(6):805-808.(Biology)

Rothe M, Pan MG, Henzel WJ, Ayres TM, Goeddel DV. The TNFR2-TRAF signaling complex contains two novel proteins related to baculoviral inhibitor of apoptosis proteins. *Cell.* 1995; 83(7):1243-1252.(Biology)

Roy N, Deveraux QL, Takahashi R, Salvesen GS, Reed JC. The c-IAP-1 and c-IAP-2 proteins are direct inhibitors of specific caspases. *EMBO J.* 1997; 16(23):6914-6925.(Biology)

Roy N, Mahadevan MS, McLean M, et al. The gene for neuronal apoptosis inhibitory protein is partially deleted in individuals with spinal muscular atrophy. *Cell.* 1995; 80(1):167-178.(Biology)

Salvesen GS, Duckett CS. IAP proteins: blocking the road to death's door. Nat Rev Mol Cell Biol. 2002; 3(6):401-410.(Biology)

552783 Rev. 4 Page 2 of 2