

Technical Data Sheet

Bcl-2 Related Sampler Kit

Product Information

Material Number:	612742
Size:	10 µg
Concentration:	250 µg/ml
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Members of the Bcl-2 protein family contains 1 to 4 bcl-2 homology domains (BH1-4), and in some cases, C-terminal hydrophobic regions that promote membrane binding. Bcl-2 is the prototypic anti-apoptotic gene that encodes two protein products, Bcl-2a and Bcl-2b, which differ at their C-terminal hydrophobic regions that localize them to the mitochondrial membrane. Bcl-2 inhibition of apoptosis is modulated by homodimerization or heterodimerization with Bax, Bad and Beclin. Like Bcl-2, Bcl-xL inhibits cell death. Bcl-x proteins include, bcl-xL and bcl-xS, which arise from alternate 5' splice sites located within the first coding exon of the bcl-x gene. Bcl-xL is 233 aa, and is similar in size and structure to Bcl-2. The bcl-xS polypeptide shows a deletion of 63 aa, which consist of the region of Bcl-xL with the highest degree of amino acid identity to Bcl-2. Bcl-xS inhibits Bcl-2 mediated cell survival. Anti-apoptotic functions of Bcl-2 and Bcl-x are regulated through interactions with Bax, Bak, Bad, Bid, Bim, and Bik. Bax contains the conserved BH1 and BH2 domains, which allow for its homodimerization or heterodimerization with Bcl-2. The ratio of Bax homodimers to Bax/Bcl-2 heterodimers is an apoptotic checkpoint. Bad contains BH1 and BH2 domains, and dimerizes with Bcl-xL and Bcl-2. Bid contains a BH3 domain, but does not contain other Bcl-2 family domains. Caspase-8 cleavage of Bid produces a 15 kDa C-terminal fragment and a 6.5 kDa N-terminal fragment. The C-terminal fragment translocates to the mitochondria and promotes the release of cytochrome C during apoptosis.

Antibody	Component No.	Cat#(50µg)	Isotype	MW	WB	IP	IF	IH	Human	Dog	Rat	Mouse	Chick	Control	Dilution
Bad	51-9001911	610391	IgG2b	23	+	—	+	+	+		+	+		A431	1:500
BAG-1	51-9002071	611868	IgG1	50/46	+		-		+					HeLa	1:15,000
Bax	51-9001914	610982	IgG1	21	+	nat/den	+		+	+				HepG2	1:250
Bcl-2	51-9001912	610538	IgG1	26	+	nat/den	+		+	+	+	+	+	Jurkat	1:500
Bcl-x	51-9001909	610209	IgG2b	26	+	-	+	+	-	-	+	+	+	Mouse Macrophage	1:500
Bcl-x	51-9001913	610746	IgG1	26	+	-	+	+	+		+	+		Human Endothelial	1:500
Beclin	51-9001910	612112	IgG2a	61	+		-	+	+	+	+	+	+	Jurkat	1:500
Bid	51-9001916	611528	IgG1	23	+		+		+			-		Jurkat	1:250
Bid	51-9001908	611866	IgG1	23	+		-		-			+		Macrophage+IFNg/L	1:1000

IP: nat = native condition, den = denaturing conditions

Dilutions are recommended based on western blotting on the indicated positive control.

This kit includes 10 µg of each antibody listed at a concentration of 250 µg/ml. No substitutions allowed.

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
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Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharming/en/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.

BD Biosciences

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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.