

ARG21414 anti-Bcl XL antibody [7B2.5]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [7B2.5] recognizes Bcl XL
Tested Reactivity	Hu, Ms, Rat, R. Mk
Tested Application	ELISA, FACS, ICC/IF, IHC-P, IP, WB
Specificity	Human/Mouse/Rat/Rhesus Bcl-xL.
Host	Mouse
Clonality	Monoclonal
Clone	7B2.5
Isotype	IgG3, kappa
Target Name	Bcl XL
Species	Human
Immunogen	Recombinant human Bcl-xS
Conjugation	Un-conjugated
Alternate Names	Apoptosis regulator Bcl-X; BCLXS; BCL-XL/S; PPP1R52; bcl-xS; Bcl-2-like protein 1; Bcl2-L-1; Bcl-X; BCLX; bcl-xL; BCL2L; BCLXL

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	FACS	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
	IP	Assay-dependent
	WB	< 1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Buffer	BBS (pH 8.2)
Concentration	0.1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

BCL2L1

Gene Full Name

BCL2-like 1

Background

The protein encoded by this gene belongs to the BCL-2 protein family. BCL-2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. The proteins encoded by this gene are located at the outer mitochondrial membrane, and have been shown to regulate outer mitochondrial membrane channel (VDAC) opening. VDAC regulates mitochondrial membrane potential, and thus controls the production of reactive oxygen species and release of cytochrome C by mitochondria, both of which are the potent inducers of cell apoptosis. Two alternatively spliced transcript variants, which encode distinct isoforms, have been reported. The longer isoform acts as an apoptotic inhibitor and the shorter form acts as an apoptotic activator. [provided by RefSeq, Jul 2008]

Function

Potent inhibitor of cell death. Inhibits activation of caspases. Appears to regulate cell death by blocking the voltage-dependent anion channel (VDAC) by binding to it and preventing the release of the caspase activator, CYC1, from the mitochondrial membrane. Also acts as a regulator of G2 checkpoint and progression to cytokinesis during mitosis.

Isoform Bcl-X(L) also regulates presynaptic plasticity, including neurotransmitter release and recovery, number of axonal mitochondria as well as size and number of synaptic vesicle clusters. During synaptic stimulation, increases ATP availability from mitochondria through regulation of mitochondrial membrane ATP synthase F(1)F(0) activity and regulates endocytic vesicle retrieval in hippocampal neurons through association with DMN1L and stimulation of its GTPase activity in synaptic vesicles.

Calculated Mw

Isoform Bcl-X(S) promotes apoptosis. [UniProt]

PTM

26 kDa

Proteolytically cleaved by caspases during apoptosis. The cleaved protein, lacking the BH4 motif, has pro-apoptotic activity.

Phosphorylated on Ser-62 by CDK1. This phosphorylation is partial in normal mitotic cells, but complete in G2-arrested cells upon DNA-damage, thus promoting subsequent apoptosis probably by triggering caspases-mediated proteolysis. Phosphorylated by PLK3, leading to regulate the G2 checkpoint and progression to cytokinesis during mitosis. Phosphorylation at Ser-49 appears during the S phase and G2, disappears rapidly in early mitosis during prometaphase, metaphase and early anaphase, and re-appears during telophase and cytokinesis.