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ProductInformation

Anti-Bcl-X_L and Bcl-X_S
Developed in Rabbit,
IgG Fraction of Antiserum

Product Number **B 6054**

Product Description

Anti-Bcl-X_L and Bcl-X_S is developed in rabbit using a fusion protein containing the calmodulin-binding domain of myosin light chain kinase fused to amino acids 42-142 of chicken Bcl-X as immunogen. This sequence shares 75% homology with amino acids 46-146 of human, mouse, and rat Bcl-X. The IgG fraction of antiserum is purified using protein A.

Anti-Bcl-X_L/X_S recognizes both Bcl-X_L (29 kDa) and Bcl-X_S (21 kDa) by immunoblotting in both human and chicken. This antibody can be used in immunoblotting and immunocytochemistry (hen granulosa cells).[1]

The *bcl-x* gene belongs to the *ced-9/bcl-2* gene family and is conserved in organisms as evolutionarily diverse as *C. elegans* and humans. Expression of *bcl-x* appears highest in lymphoid and nerve tissue. Alternative splicing within the first exon of bcl-x transcripts yields two mRNA species. One mRNA encodes a 29 kDa protein called Bcl-X_L while the other mRNA encodes a 21 kDa protein called Bcl-X_S. Like Bcl-2, Bcl-X_L, is a negative regulator of apoptosis and overexpression of Bcl-X_L has been shown to protect cells from apoptosis induced by a variety of stimuli. Bcl-2 family members also inhibit activation of caspases in cells which may play a part in the apoptosis inhibition by Bcl-2s.[2, 3] In contrast, overexpression of Bcl-X_S impairs the ability of Bcl-2 to protect cells from death induced by growth factor withdrawal.

Reagent

Anti-Bcl-X_L and Bcl-X_S is supplied as the IgG fraction of antiserum in 0.1 M Tris-glycine, pH 7.4, containing 0.15 M NaCl, and 0.05% sodium azide before the addition of glycerol to 30%.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store at –20 °C. For extended use, freeze in working aliquots. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

By immunoblotting, a working antibody concentration of 0.5-2 µg/ml is recommended using a RIPA lysate from EGF-stimulated human A431 cells, anti-rabbit IgG-peroxidase conjugate, and a chemiluminescence detection system.

Note**:** In order to obtain the best results and assay sensitivity in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Johnson, A.L., et al., Endocrinology, **140**, 4521-4529 (1999).
2. Clem, R.J., et al., Proc. Natl. Acad. Sci. USA, **95**, 554 (1998).
3. Boise, L.H., et al., Cell, **74**, 597 (1993).

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