Revision 1

#8756 Store at -20C

BIRC6 (D8B5) Rabbit mAb

Cell Signaling TECHNOLOGY®

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R Hm Mk	Endogenous	530	Rabbit IgG	#Q9NR09	57448

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

BIRC6 (D8B5) Rabbit mAb recognizes endogenous levels of total BIRC6 protein. Several bands of unknown origin between 120 and 500 kDa are detected in some cell lines. It is possible that these bands are degradation products of BIRC6.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp147 in human BIRC6 protein.

Background

BIRC6/BRUCE/APOLLON is a member of the inhibitor of apoptosis protein (IAP) family. BIRC6 is a huge 530 kDa membrane-associated protein with a single survivin-like baculoviral IAP repeat (BIR) domain at the amino terminus, and a ubiquitin-conjugating enzyme domain at the carboxy terminus (1-3). Several research studies support the notion that BIRC6 functions as a dual regulator of cell death and cell division (4-6), and BIRC6 is the only essential BIR-containing protein in mammalian cell growth and development (4,7). Research studies have documented the overexpression of BIRC6 in colon cancer stem cells and in other cancer cell lines (8,9). BIRC6 inhibits apoptosis by either 1) binding to and inhibiting caspases (10) or 2) ubiquitinating the IAP antagonist SMAC and the apoptosis initiator caspase 9, thereby targeting these proteins for proteasomal degradation (4,5). BIRC6 itself is regulated by ubiquitination and proteasomal degradation upon stimulation of apoptosis (7,11).

Background References

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3. Martin, S.J. (2004) *Nat Cell Biol* 6, 804-6.
4. Hao, Y. et al. (2004) *Nat Cell Biol* 6, 849-60.
5. Qiu, X.B. and Goldberg, A.L. (2005) *J Biol Chem* 280, 174-82.
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9. Chen, Z. et al. (1999) *Biochem Biophys Res Commun* 264, 847-54.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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