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#8723

Apaf-1 (D7G4) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 135	Source/Isotype: Rabbit IgG	UniProt ID: #O14727	Entrez-Gene Id: 317
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Product Usage Information

Application

Western Blotting

Dilution

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

Apaf-1 (D7G4) Rabbit mAb recognizes endogenous levels of total Apaf-1 protein.

Species predicted to react based on 100% sequence homology

Monkey, Bovine, Pig

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human Apaf-1 protein.

Background

Apoptotic protease activating factor 1 (Apaf-1), originally identified as the mammalian homolog of the *C. elegans* apoptotic regulatory protein CED-4, is an important signaling protein involved in the activation of caspase-9 during apoptosis (1). Cytosolic Apaf-1 forms a complex with caspase-9 in the presence of cytochrome c and dATP, ultimately leading to caspase-9 activation and subsequent activation of caspase-3 (2,3). The protein contains an amino-terminal CARD domain, a central CED-4 homology domain, and multiple WD-40 repeats at the carboxy-terminus. Several isoforms of Apaf-1 are expressed through alternative splicing generating a small insert following the CARD domain as well as an extra WD-40 repeat (4). Apaf-1 knock-out mice display widespread defects in apoptosis and resistance to a variety of apoptotic stimuli (5,6).

Background References

1. Zou, H. et al. (1997) *Cell* 90, 405-13.
2. Zou, H. et al. (1999) *J Biol Chem* 274, 11549-56.
3. Saleh, A. et al. (1999) *J Biol Chem* 274, 17941-5.
4. Benedict, M.A. et al. (2000) *J Biol Chem* 275, 8461-8.
5. Cecconi, F. et al. (1998) *Cell* 94, 727-37.
6. Yoshida, H. et al. (1998) *Cell* 94, 739-50.

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

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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