## A20/TNFAIP3 (D13H3) Rabbit mAb





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| Applications:<br>W, W-S, IP  | <b>Reactivity:</b><br>H M R Mk | <b>Sensitivity:</b><br>Endogenous  | <b>MW (kDa):</b><br>82 | Source/Isotype:<br>Rabbit IgG     | <b>UniProt ID:</b><br>#P21580                     | Entrez-Gene Id:<br>7128 |  |  |
|--|--------------------------------|--|------------------------|-----------------------------------|---|-------------------------|--|--|
| Product Usage<br>Information   |                                | <b>Application</b><br>Western Blotting<br>Simple Western™<br>Immunoprecipitation   |                        |                                   | <b>Dilution</b><br>1:1000<br>1:10 - 1:50<br>1:100 |                         |  |  |
| 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  |                                | A20/TNFAIP3 (D13H3) Rabbit mAb recognizes endogenous levels of total A20/TNFAIP3 protein.  |                        |                                   |   |                         |  |  |
| Source / Purific   | ation                          | Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the<br>amino terminus terminus of human A20/TNFAIP3 protein. The antibody was prepared in collaboration<br>with Dr. Marc Schmidt-Supprian, Max Planck Institute of Biochemistry.  |                        |                                   |   |                         |  |  |
| Background   |                                | A20, also referred to as TNF-α-induced protein 3 (TNFAIP3), is cytokine-inducible protein that functions to inhibit apoptosis and activate NF-κB (1,2). It was first identified as a TNF-α inducible primary response gene in human umbilical vein endothelial cells, and encodes a 790-amino acid protein containing seven Cys2/Cys2-zinc finger motifs (3). Constitutive expression of A20 is observed in lymphoid tissues (4), but it is transiently expressed in a variety of cell types in response to inflammatory signals such as TNF-α (3,5), IL-1 (3,5), phorbol esters (6), and LPS (7). Expression of A20 can confer resistance to apoptosis and NF-κB activation triggered by these signals, probably through interference with TRAF (TNF receptor associated factor) family members (8,9), and interaction with the NF-κB inhibiting protein ABIN (10). Studies also show that A20 contains site-specific ubiquitin modifying activity that can contribute to its biological functions (11,12). The amino-terminus of A20 contains deubiquitinating (DUB) activity for Lys63 branches, such as those found in TRAF6 and RIP, while the carboxyl-terminus contains ubiquitin ligase (E3) activity for Lys48 branches of the same substrates and leads to their degradation (12). |                        |                                   |   |                         |  |  |
| Background References 1. Beyaert, R. et al. (2000) Biochem Pharmacol 60, 1143-51.   2. Lee, E.G. et al. (2000) Science 289, 2350-4. 3. Dixit, V.M. et al. (1990) J Biol Chem 265, 2973-8.   4. Tewari, M. et al. (1995) J Immunol 154, 1699-706. 5. Jäättelä, M. et al. (1996) J Immunol 156, 1166-73.   6. Laherty, C.D. et al. (1993) J Biol Chem 268, 5032-9. 7. Hu, X. et al. (1998) Blood 92, 2759-65.   8. Song, H.Y. et al. (1996) Proc Natl Acad Sci USA 93, 6721-5. 9. Heyninck, K. and Beyaert, R. (1999) FEBS Lett 442, 147-50.   10. Heyninck, K. et al. (2004) Biochem J 378, 727-34. 12. Lin, S.C. et al. (2008) J Mol Biol 376, 526-40. |                                |  |                        |                                   |   |                         |  |  |
|  |                                |  |                        |                                   |   |                         |  |  |
| Species Reactivity   |                                | Species reactivity is determined by testing in at least one approved application (e.g., western blot).   |                        |                                   |   |                         |  |  |
| Western Blot B   | uffer                          | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X<br>TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.  |                        |                                   |   |                         |  |  |
| Applications Ke  | ∋y                             | W: Western Blotting W-S: Simple Western™ IP: Immunoprecipitation   |                        |                                   |   |                         |  |  |
| Cross-Reactivity Key H: Human M: Mouse R: Rat Mk: Monkey   |                                |  |                        |                                   |   |                         |  |  |
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