



Sheep antibody to SUMO-1 (6-21): whole serum

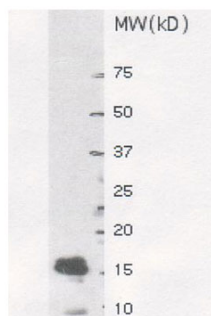
Catalogue No.:	S-064-100
Description:	SUMO-1 binds to a wide range of target proteins as part of a post-translational modification system. Unlike ubiquitin, it does not seem to target protein for degradation, but is involved in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis, apoptosis, protein stability and signal transduction. SUBUNIT: Covalently attached to a number of proteins such as PML, RANGAP1, HIPK2, SP100, p53, p73alpha, MDM2, JUN and DNMT3B. Also interacts with HIF1A, HIPK2, HIPK3, CHD3, PIAS1, EXOSC9, TDG, RAD51 and RAD52. SUBCELLULAR LOCATION: Nucleus; nuclear membrane. Nucleus; nucleoplasm; nuclear speckle. Cytoplasm. SIMILARITY: Belongs to the ubiquitin family. SMT3 subfamily. SIMILARITY: Contains 1 ubiquitin-like domain. PTM: Cleavage of the last four amino acids of the carboxy-terminus of the precursor form by SENP1 or SENP2 is necessary for function. Several pseudogenes have been reported as well as a number of alternatively spliced isoforms.
Batch No.:	See product label
Unit size:	100 µl
Antigen:	A synthetic peptide (AKPSTEDLGDKKEGEY) as part of human SUMO-1 peptide (aa: 6-21) conjugated to diphtheria toxoid has been used as the immunogen. This antigen is homologous with SUMO-1 of rat.
Other Names:	Small ubiquitin-related modifier 1; Ubiquitin-like protein SMT3C; SMT3 homolog 3; Ubiquitin-homology domain protein PIC1; Ubiquitin-like protein UBL1; GAP-modifying protein 1; GMP1; Sentrin; SUMO1; SMT3C; SMT3H3; UBL1
Accession:	SUMO1_HUMAN
Produced in:	Sheep
Purity:	Whole serum
Applications:	IHC, WB. A dilution of 1:2000 to 1:4000 is recommended for immunohistochemistry and 1:4000 to 1:8000 for western blot. Cell lysate from Hela and NIH-3T3 cell lysates may be used as a positive control, and for IHC, lung carcinoma may be used. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	This antiserum recognises human SUMO-1 and not ubiquitin.
Cross-reactivity:	This antiserum is known to cross react with rat and human SUMO-1.
Form:	Lyophilised
Reconstitution:	Reconstitute in 100 µl of sterile water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20°C for a higher stability, and at 4°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Expiry Date:	12 months after purchase
References:	1. Yang, S.H. et al. Mol. Cell 13(4):611-617 (2004). 2. Ohshima, T. et al. J. Biol. Chem. 278(51):50833-50842 (2003).

FOR RESEARCH USE ONLY



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3. Bailey, D. et al. J. Biol. Chem. 279(1):692-703 (2004).
4. Ling, Y. et al. Nucleic Acids Res. 32(2):598-610 (2004).
5. Pountney, D.L. et al. Exp. Neurol. 184(1):436-446 (2003).



Western blot detection of recombinant SUMO-1 protein using Sheep antibody to SUMO-1 (6-21): ws, (catalogue no. S-064-100) at a dilution of 1:8000. The protein sample was 1 μ l of E.Coli cell lysate containing approximately 50 ng of recombinant SUMO-1 protein. This antibody recognises a major band of approximately 17 kDa corresponding to SUMO-1, as well as a smaller minor band of 8 kDa.

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