

Product datasheet for TA385361S

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Sumo 1 (SUMO1) Rabbit Monoclonal Antibody [Clone ID: R04-9G9]

Product data:

Product Type: Primary Antibodies

Clone Name: R04-9G9
Applications: IHC, WB

Recommended Dilution: WB: 1/1000-1/5000

IHC: 1/20-1/100

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

Immunogen: A synthetic peptide of human Sumo 1

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Concentration: lot specific

Purification: Affinity Purified
Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 12 kDa; Observed MW: _

Gene Name: small ubiquitin-like modifier 1 **Database Link:** <u>Entrez Gene 7341 Human</u>

P63165



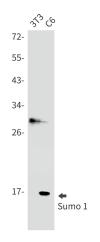
Background:

Swiss-Prot Acc.P63165.Ubiquitin-like protein that can be covalently attached to proteins as a monomer or a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by E3 ligases such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Involved for instance in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Covalently attached to the voltage-gated potassium channel KCNB1; this modulates the gating characteristics of KCNB1 (PubMed:19223394). Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins. May also regulate a network of genes involved in palate development. Covalently attached to ZFHX3 (PubMed:24651376).

Synonyms:

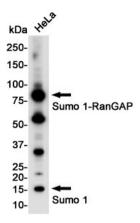
DAP-1; GMP1; OFC10; PIC1; SENP2; Sentrin; SMT3; SMT3C; SMT3H3; SUMO-1; UBL1

Product images:

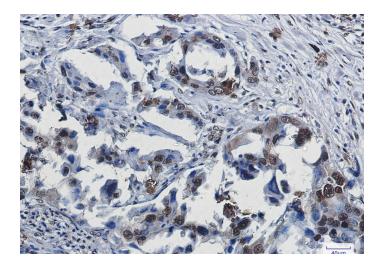


Western blot analysis of Sumo 1 in 3T3, C6 lysates using SUMO1 antibody.





Western blot analysis of Sumo 1 in Hela lysates using Sumo 1 antibody.



Immunohistochemistry analysis of paraffinembedded Human lung cancer using Sumo 1 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.