

Recombinant Mouse SP100 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51164

Size: 10ug, 100ug

Protein Name: Nuclear autoantigen Sp-100 (Nuclear dot-associated Sp100 protein)
(Speckled 100 kDa)

Synonym: Sp100

UniProt ID: O35892

UniProt Link: www.uniprot.org/uniprotkb/O35892/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 482 AA

Molecular Weight: 55 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEGSDGSPRMSTEQENTEMHLIECMLKHFKTQKVAISNAIRSTFPFLESIRDHEFITGKMYEDLLDSC
RSLVPVDKVIYRALEEELEKKFDMTVLCELFNEVNMEKYPDLNLIRRSFGCVFPNELCFQGIDGGNPNS
QLSLEQGPASYSQGSPPNGSSLDLSASEGWRSNDRRNSNLMQANQTENHQLAESPGHLDSCSELQ
VQLNNRDATPESCSLLPQNEERAVQLNYELQINPCFVQLVDVKKENSSFSLAGNQQTRARTNQNE
SEIIELSSGSDSDNGENFSEATTTVPSQPAPAYSRRKPPTLRRDRGGDTSDTESSIIIRRRKRTGRKKRE
RLGSYLIRNIKIPMKPSWKTAFLARSANPSSQRRRKRGPRIPREENADFGGAELPVVCGNAQGFLDK
EKFKQGIYVRSIRGKTGRLFTPMDFEIEGNCEKAKNWRQSIKCKGWTLRELIQKGVLDQPPRKKKET
PRNPRQTRRQVNAL

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Nuclear autoantigen Sp-100 (Nuclear dot-associated Sp100 protein) (Speckled 100 kDa) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Together with PML, this tumor suppressor is a major constituent of the PML bodies, a subnuclear organelle involved in a large number of physiological processes including cell growth, differentiation and apoptosis. Functions as a transcriptional coactivator of ETS1 and ETS2. Under certain conditions, it may also act as a corepressor of ETS1 preventing its binding to DNA. Through the regulation of ETS1 it may play a role in angiogenesis, controlling endothelial cell motility and invasion. Through interaction with the MRN complex it may be involved in the regulation of telomeres lengthening. May also regulate TP53-mediated transcription and through CASP8AP2, regulate FAS-mediated apoptosis. May also play a role in infection by viruses through mechanisms that may involve chromatin and/or transcriptional regulation (By similarity).

Subcellular Localization: Nucleus . Nucleus, PML body . Nucleus, nuclear body . Cytoplasm .
Note=Accumulates in the cytoplasm upon FAS activation.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.