Datasheet for ABIN7554766

NSMCE2 Protein (AA 1-247) (His tag)

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Overview

Quantity:	1 mg
Target:	NSMCE2
Protein Characteristics:	AA 1-247
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NSMCE2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant NSMCE2 Protein expressed in mammalian cells.
Sequence:	MPGRSSSNSG STGFISFSGV ESALSSLKNF QACINSGMDT ASSVALDLVE SQTEVSSEYS MDKAMVEFAT LDRQLNHYVK AVQSTINHVK EERPEKIPDL KLLVEKKFLA LQSKNSDADF QNNEKFVQFK QQLKELKKQC GLQADREADG TEGVDEDIIV TQSQTNFTCP ITKEEMKKPV KNKVCGHTYE EDAIVRMIES RQKRKKKAYC PQIGCSHTDI RKSDLIQDEA LRRAIENHNK KRHRHSE **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts.

Product Details

	• Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	NSMCE2
Alternative Name:	NSMCE2 (NSMCE2 Products)
Background:	E3 SUMO-protein ligase NSE2 (EC 2.3.2.-) (E3 SUMO-protein transferase NSE2) (MMS21 homolog) (hMMS21) (Non-structural maintenance of chromosomes element 2 homolog) (Non-SMC element 2 homolog),FUNCTION: E3 SUMO-protein ligase component of the SMC5-SMC6 complex, a complex involved in DNA double-strand break repair by homologous recombination (PubMed:16055714, PubMed:16810316). Is not be required for the stability of the complex (PubMed:16055714, PubMed:16810316). The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks (PubMed:16055714, PubMed:16810316). The complex is required for telomere maintenance via recombination in ALT (alternative lengthening of telomeres) cell lines and mediates sumoylation of shelterin complex (telosome) components which is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs) (PubMed:17589526). Acts as an E3 ligase mediating SUMO attachment to various proteins such as SMC6L1 and TSNAX, the shelterin complex subunits TERF1, TERF2, TINF2 and TERF2IP, RAD51AP1, and maybe the cohesin components RAD21 and STAG2 (PubMed:16055714, PubMed:16810316, PubMed:17589526, PubMed:31400850). Required for recruitment of telomeres to PML nuclear

Target Details

	bodies (PubMed:17589526). SUMO protein-ligase activity is required for the prevention of DNA damage-induced apoptosis by facilitating DNA repair, and for formation of APBs in ALT cell lines (PubMed:17589526). Required for sister chromatid cohesion during prometaphase and mitotic progression (PubMed:19502785). {ECO:0000269|PubMed:16055714, ECO:0000269|PubMed:16810316, ECO:0000269|PubMed:17589526, ECO:0000269|PubMed:19502785, ECO:0000269|PubMed:31400850}.
Molecular Weight:	27.9 kDa
UniProt:	Q96MF7

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months