

Datasheet for ABIN7564795 **POT1 Protein (AA 1-640) (His tag)**



Overview

Quantity:	1 mg
Target:	POT1
Protein Characteristics:	AA 1-640
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This POT1 protein is labelled with His tag.

Product Details

Froduct Details	
Purpose:	Custom-made recombinant Pot1 Protein expressed in mammalian cells.
Sequence:	MSLVSTAPYT YTPLNLLKEG TIANVYGVVK FFKPPYVSKG TDYCSVVTIV DQTNVKLTCM
	LFSGNYEALP IIYKVGDIVR FHRLKIQVYK NELQGINCSG FASLTFEGTV GMPVTARTSS
	KVFSFTPQDQ KMVEALRVWA SKHISASSTL VQLCDAQPMQ YYDLTCQLLG KAQVDSTAFL
	LKVWDGTQTV LPSWRVSTQD LTFEGDLSHI ERLQSLVVDI LVYDNHVQVA RSIEVGCFLR
	LYSLHTKLQP GNSETSSSES LRLEFHLHGG TSYGRGIRVL PDTSPCVDQL KKALEGANLP
	VTETSTGICQ SENGDSSALS NSGSGAVSPY EEERCQQVSA TILTNHQHLE KTPLCAILTQ
	KAPQQYRVRA KLRSYLPRRL SQSVKLLCPK CHSVQEVPHG DSLDKILQDA ATEAPDIKLK
	ATSLYYSKVW TTEDQGGRQV AVHFVKNNGI LPASSECLIL IEGGRLCEVS KLSSKFHSVM
	PVRSGPESLE LLTLSAPFLI QGKVHHYGCK QCSSLKPIQN LNSRFHKGPW TPSSVAEALG
	VVPLQYVFVM VFTLDDGTGV LEAYLKDSEH FFKIPASEVL TDDDLQRSLE TIMDMICPPG
	IKVDAYPWLE CLLKSYNVTI GTERRICYQI FDTTVAENVV 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. 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:	POT1
Alternative Name:	Pot1 (POT1 Products)
Background:	Protection of telomeres protein 1 (mPot1) (POT1-like telomere end-binding protein),FUNCTION
	Component of the telomerase ribonucleoprotein (RNP) complex that is essential for the
	replication of chromosome termini. Is a component of the double-stranded telomeric DNA-
	binding TRF1 complex which is involved in the regulation of telomere length by cis-inhibition of
	telomerase. Also acts as a single-stranded telomeric DNA-binding protein and thus may act as
	a downstream effector of the TRF1 complex and may transduce information about telomere
	maintenance and/or length to the telomere terminus. Component of the shelterin complex
	(telosome) that is involved in the regulation of telomere length and protection. Shelterin

associates with arrays of double-stranded TTAGGG repeats added by telomerase and protects

chromosome ends, without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways. Binds to two or more telomeric single-stranded 5'-TTAGGG-3' repeats (G-strand) and with high specificity to a minimal telomeric single-stranded 5'-TAGGGTTAG-3' sequence. Binds telomeric single-stranded sequences internally or at proximity of a 3'-end. Its activity is TERT dependent but it does not increase TERT activity (By similarity). {ECO:0000250}.

Molecular Weight: 70.9 kDa

UniProt: Q91WC1

Pathways: Cell Division Cycle, Telomere Maintenance

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