Datasheet for ABIN3096406

WEE1 Protein (AA 1-646) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	WEE1
Protein Characteristics:	AA 1-646
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This WEE1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MSFLSRQQPP PPRRAGAACT LRQKLIFSPC SDCEEEEEEE EEEGSGHSTG EDSAFQEPDS PLPPARSPTE PGPERRRSPG PAPGSPGELE EDLLLPGACP GADEAGGGAE GDSWEEEGFG SSSPVKSPAA PYFLGSSFSP VRCGGPGDAS PRGCGARRAG EGRRSPRPDH PGTPPHKTFR KLRLFDTPHT PKSLLSKARG IDSSSVKLRG SSLFMDTEKS GKREFDVRQT PQVNINPFTP DSLLLHSSGQ CRRRKRTYWN DSCGEDMEAS DYELEDETRP AKRITITESN MKSRYTTEFH ELEKIGSGEF GSVFKCVKRL DGCIYAIKRS KKPLAGSVDE QNALREVYAH AVLGQHSHVV RYFSAWAEDD HMLIQNEYCN GGSLADAISE NYRIMSYFKE AELKDLLLQV GRGLRYIHSM SLVHMDIKPS NIFISRTSIP NAASEEGDED DWASNKVMFK IGDLGHVTRI SSPQVEEGDS RFLANEVLQE NYTHLPKADI FALALTVVCA AGAEPLPRNG DQWHEIRQGR LPRIPQVLSQ EFTELLKVMI HPDPERRPSA MALVKHSVLL SASRKSAEQL RIELNAEKFK NSLLQKELKK AQMAKAAAEE RALFTDRMAT RSTTQSNRTS RLIGKKMNRS VSLTIY

Product Details

	Sequence without tag. The proposed Strep-Tag is based on experience s 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.
Characteristics:	Key Benefits: • Made in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed). • 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. 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. Expression System: • ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. • During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Product Details

Grade:	custom-made

Target Details

Target:	WEE1
Alternative Name:	WEE1 (WEE1 Products)
Background:	Wee1-like protein kinase (WEE1hu) (EC 2.7.10.2) (Wee1A kinase),FUNCTION: Acts as a negative regulator of entry into mitosis (G2 to M transition) by protecting the nucleus from cytoplasmically activated cyclin B1-complexed CDK1 before the onset of mitosis by mediating phosphorylation of CDK1 on 'Tyr-15' (PubMed:7743995, PubMed:8348613, PubMed:8428596, PubMed:15070733). Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase (PubMed:7743995, PubMed:8348613, PubMed:8428596). Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of monomeric CDK1 does not occur (PubMed:7743995, PubMed:8348613, PubMed:8428596). Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated (PubMed:7743995). A correlated decrease in protein level occurs at M/G1 phase, probably due to its degradation (PubMed:7743995). {ECO:0000269|PubMed:15070733, ECO:0000269|PubMed:7743995, ECO:0000269|PubMed:8348613, ECO:0000269|PubMed:8428596}.
Molecular Weight:	71.6 kDa
UniProt:	P30291
Pathways:	Cell Division Cycle, Mitotic G1-G1/S Phases, M Phase

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional

Application Details

	components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months