

ProQinase™ SUPT5H 754-837

SPT5 homolog, DSIF elongation factor subunit

Recombinant Protein Kinase Substrate

HGNC Symbol: SUPT5H

Synonyms: SPT5H; SPT5; FLJ34157

Product No.: 1799-0000-1

Lot: 001

Description: human SUPT5H, internal fragment, amino acids G₇₅₄-E₈₃₇ (as in [NCBI/Protein](#) entry NP_003160.2), N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in E.coli

Theoretical MW_{Fusion Protein}: 37,586 Da

Expression host: E.coli

Purification: GST-Affinity Chromatography

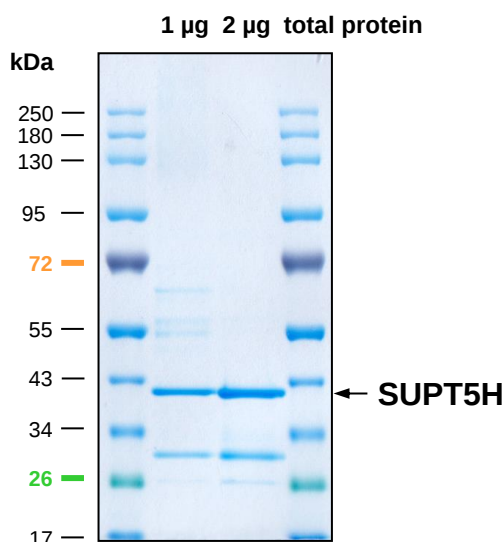
Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 15 mM reduced glutathione, 10 % glycerol

Storage temperature: -80°C

For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10 µl are not advisable. Avoid repeated freeze-thaw cycles!

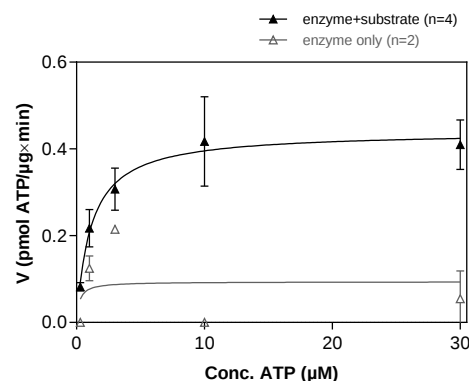
Protein concentration: 2.225 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

SUPT5H 754-837 Lot 001:
Coomassie stain



Phosphorylation of SUPT5H by CDK11B/CycK

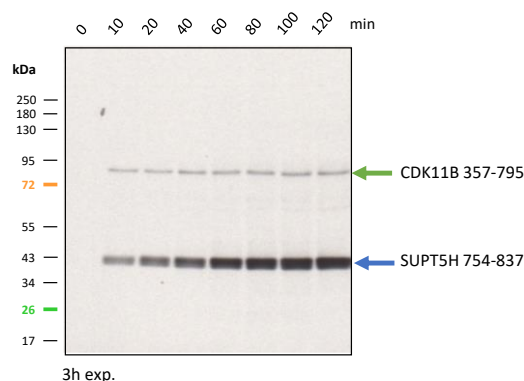
Radiometric filter binding assay



Assay conditions:

70 mM HEPES-NaOH, pH 7.5
3 mM MgCl₂
3 mM MnCl₂
3 µM Na-orthovanadate
1.2 mM DTT
50 µg/ml PEG_{20,000}
ATP: 1 µM
Substrate: variable concentration
Kinase: 2.0 µg/ml
MSFC membrane (Millipore)

Autoradiography: time-course of phosphorylation by CDK11B 357-795/CycK



Assay conditions:

70 mM HEPES-NaOH, pH 7.5
3 mM MnCl₂
3 µM Na-orthovanadate
1.2 mM DTT
50 µg/ml PEG_{20,000}
ATP: variable concentration
1 % (v/v) DMSO
Substrate: 4 µg/50 µl
Kinase: 400 ng/50 µl

SUPT5H 754-837

Product No.: 1799-0000-1

SUPT5H 754-837 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHGG	RDSLEVLFG	240
241	PLAMVGSRRP	GGMTSTYGR	PMYGSQTPMY	GSGSRTPMYG	SQTPLQDGSR	TPHYGSQTPL	300
301	HDGSRTPAQS	GAWDPNNPNT	PSRAEEEEE				360

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: SUPT5H fragment

SUPT5H wt ¹ Amino Acid Sequence							
1	MSDSEDSNFS	EEEDSERSSD	GEEAEVDEER	RSAAGSEKEE	EPEDEEEEEE	EEEYDEEEEE	60
61	EDDDRPPKKP	RHGGFILDEA	DVDDEYEDED	QWEDGAEDIL	EKEEIEASNI	DNVVLDEDRS	120
121	GARRLQNLWR	DQREEELGEY	YMKKYAKSSV	GETVYGGSD	LSDDITQQQL	LPGVKDPNLW	180
181	TVKCKIGEER	ATAISLMRKF	IAYQFTDTPL	QIKSVVAPEH	VKGYYVEAY	KQTHVKQAIE	240
241	GVGNLRLGYW	NQQMVPIKEM	TDVLKVVKEV	ANLKPWSVR	LKRGYKDDI	AQVDYVEPSQ	300
301	NTISLKMIPR	IDYDRIKARM	SLKDWFAKRR	KFKRPPQRLF	DAEKIRSLGG	DVASDGDFLI	360
361	FEGNRYSRKG	FLFKSFAMSA	VITEGVKPTL	SELEKFEDQP	EGIDLEVTE	STGKEREHNF	420
421	QPGDNVEVCE	GELINLQGI	LSVDGNKITI	MPKHEDLKD	LEFPAQELRK	YFKMGDHVKV	480
481	IAGRFEGDTG	LIVRVEENFV	ILFSDLTMHE	LKVLPRDLQL	CSETASGVDV	GGQHEWGELV	540
541	QLDPQTVGVI	VRLERETQV	LNMYGKVVTV	RHQAATRKKD	NRFAVALDSE	QNNIHVKDIV	600
601	KVIDGPHSGR	EGEIRHLFRS	FAFLHCKKLV	ENGGMFVCKT	RHLVLAGGSK	PRDVTNFTVG	660
661	GFAPMSPRIS	SPMHPSAGGQ	RGGFGSPGGG	SGGMSRGRGR	RDNELIGQTV	RISQGPYKGY	720
721	IGVVKDATES	TARVELHSTC	QTISVDRQRL	TTVGSRRPGG	MTSTYGRTPM	YGSQTPMYGS	780
781	GSRTPMYGSQ	TPLQDGSRT	HYGSQTPHLD	GSRTPAQSGA	WDPNNPNTPS	RAEEEEEYAF	840
841	DDEPTPSPQA	YGGTPNPQTP	GYPDPSSPQV	NPQYNPQTPG	TPAMYNTDQF	SPYAAPSPQG	900
901	SYQPSPPSPQ	YHQAAPSPAG	YQNTSPASPY	HPTPSPMAYQ	ASPSPSPVGY	SPMTPGAPSP	960
961	GGYNPHTPGS	GIEQNSSDWV	TTDIQVKVRD	TYLDTQVVGQ	TGVIRSVTGG	MCSVYLKDSE	1020
1021	KVVSISSEHL	EPITPTKNNK	VKVLGEDRE	ATGVLLSIDG	EDGIVRMDLD	EQLKILNLR	1080
1081	LGKLLLEA						1140

blue: SUPT5H sequence expressed in recombinant protein

¹NCBI/Protein accession number NP_003160.2