

Division of Signal Transduction Therapy

Standard Operation Procedure

Preparation of GST-Fan1 (41-69) UBZ domain tetramer

Enzyme description:- GST-Fan1 41-69 (UBZ-domain tetramer)

Clone number:- DU20765

Source:- BL21 recombinant

Tag:- N-terminal GST

Purification method:- GSH-Sepharose

Expression level:- 5mg/L

Calculated molecular mass:-

Monoisotopic 41906 Da

Average Mass 41933 Da

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.4

Purity:- 90%

Enzyme storage buffer:-

50mM HEPES pH 7.5, 10% glycerol, 150mM NaCl, 1mM DTT

Storage temperature:- -80°C

Assay:-

Division of Signal Transduction Therapy

Clone Data Sheet

GST-Fan1 41-69 (UBZ-domain tetramer)

<u>Protein</u>	Fan1 41-69 UBZ-domain tetramer
<u>Synonyms</u>	Fanconi-associated nuclease 1; FANCD2/FANCI-associated nuclease 1; Myotubularin-related protein 15
<u>Clone Number</u>	DU20765
<u>Species</u>	Human
<u>Accession Number</u>	Protein: Q9Y2M0
<u>Tags</u>	N-terminal GST
Amino acid sequence of the expressed protein	MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAIEISMLEGAVLDIRYGVSR IAYSKDFETLKVDFLSKLP EMLKMFEDRLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPOIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLEVLFOGPLGSMAG KLACPVCSKMVPRYDLNRHLDEMCANND FGGGGGGGGG KLACPVCSKMVPRYDLNRHLDEMCANND FGGGGGGGGG KLACPVCSKMVPRYDLNRHLDEMCANND FGGGGGGGGG KLACPVCSKMVPRYDLNRHLDEMCANND
Native sequence	in bold
Protease cleavage	Prescission protease site underlined
Cloning sites	<i>NaeI/SfoI</i> insert into <i>NaeI</i> site of SC20727

DNA sequence of the expression cassette

ATGTCCCCTATACTAGGTTATTGGAAAATTAAGGGCCTTGTGCAACCCAC
TCGACTTCTTTTGAATATCTTGAAGAAAATATGAAGAGCATTTGTATG
AGCGCGATGAAGGTGATAAATGGCGAAACAAAAAGTTTGAATTGGGTTT
GAGTTTCCCAATCTTCCTTATTATATTGATGGTGATGTTAAATTAACACA
GTCTATGGCCATCATACTTATATAGCTGACAAGCACAACATGTTGGGTG
GTTGTCCAAAAGAGCGTGCAGAGATTTCAATGCTTGAAGGAGCGGTTTTG
GATATTAGATACGGTGTTCGAGAATTGCATATAGTAAAGACTTTGAAAC
TCTCAAAGTTGATTTTCTTAGCAAGCTACCTGAAATGCTGAAAATGTTTCG
AAGATCGTTTATGTCATAAAACATATTTAAATGGTGATCATGTAACCCAT
CCTGACTTCATGTTGTATGACGCTCTTGATGTTGTTTTATAACATGGACCC
AATGTGCCTGGATGCGTTCCCAAATTAGTTTGTTTTTAAAAACGTATTG
AAGCTATCCCACAAATTGATAAGTACTTGAAATCCAGCAAGTATATAGCA
TGGCCTTTGCAGGGCTGGCAAGCCACGTTTGGTGGTGGCGACCATCCTCC
AAAATCGGATCTGGAAGTTCTGTTCCAGGGGCCCTGGGATCCATGGCCG
GCAAACCTTGCTGCCCCGTTTGCAGTAAAATGGTGCCTAGATATGACTTA
AACCAGCACCTTGATGAAATGTGTGCTAACAAATGACTTCGGTGGAGGTGG
AGGTGGAGGCGGCAAACCTTGCTGCCCCGTTTGCAGTAAAATGGTGCCTA
GATATGACTTAAACCGGCACCTTGATGAAATGTGTGCTAACAAATGACTTC
GGTGGAGGTGGAGGTGGAGGC GGC AAACCTTGCTGCCCCGTTTGCAGTAA

AATGGTGCCTAGATATGACTTAAACCGGCACCTTGATGAAATGTGTGCTA
ACAATGACTTCGGTGGAGGTGGAGGTGGAGGCGCAAACCTGCCTGCCCC
GTTTGCAGTAAAATGGTGCCTAGATATGACTTAAACCGGCACCTTGATGA
AATGTGTGCTAACAAATGACTTCTGAGGCGCCGCGGCCGC