

Division of Signal Transduction Therapy

Standard Operating Procedure

Preparation of Annexin A1 [1 – 346]

Enzyme description:- Annexin A1 [1 – 346]

Clone number:- DU 38293

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Sepharose

Calculated molecular mass:-

Monoisotopic 65, 496.62 daltons

Average Mass 65, 538.41 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.09

Purity:- >80 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA,
0.1 % 2-mercaptoethanol, 0.02 % Brij-35, 1 mM benzamidine, 0.2 mM PMSF

Storage temperature:- -70 °C

Division of Signal Transduction Therapy

Clone Data Sheet

Annexin A1 [1 – 346]

<u>Protein</u>	Annexin A1 [1 – 346]
<u>Clone number</u>	DU 38293
<u>Species</u>	Human
<u>Accession number</u>	NM_000700.2
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	<p>MSPILGYWKIKGLVQPTRLLEYLEEKYEEHLYERDEGDKWRNKKFELG LEFPNLPYYIDGDVKLTSMAIIRYIADKHNMLGGCPKERAIEISMLEGA VLDIRYGVSRAYSKDFETLKVDFLSKLPPEMLKMFEDRLCHKTYLNGDH VTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPOIDKYLKSS KYIAWPLQGWQATFGGGDHPKSDLEVLFGQPLGSMAMVSEFLKQAWF I ENEEQ EYVQTVKSSKGGPGSAVSPYPTFNPSSDVAALHKAIMVKGVDEA TIIDILTKRNNAQRQOIKAAYLQETGKPLDETLKKALTGHLEEVVLALL KTPAQFDADELRAAMKGLGTDEDTLIEILASRTNKEIRDINRVYREELK RDLAKDITSDTSGDFRNALLSLAKGDRSEDFGVNEDLADSDARALYEAG ERRKGTDVNVFNTILTTRSYPQLRRVFQKYTKYSKHD MNKVL DLELKG D IEKCLTAIVKCATSKPAFFAEK LHQAMKGVGTRHKALIRIMVSRSEIDM NDIKAFYQKMYGISLCQAILDETKGDYEKILVALCGGN</p>
<u>Native sequence</u>	<p>Amino acids M1 – N346(end) of human Annexin A1. Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.</p>
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 - 228
<u>Cloning sites</u>	<i>Bam</i> H1 and <i>Not</i> 1 sites of pGEX6P1

Division of Signal Transduction Therapy

Nucleotide

Sequence of insert

ggatccATGGCAATGGTATCAGAATTCCTCAAGCAGGCCTGGTTTATTG
AAAATGAAGAGCAGGAATATGTTCAAACGTGAAGTCATCCAAAGGTGG
TCCCGGATCAGCGGTGAGCCCCTATCCTACCTTCAATCCATCCTCGGAT
GTCGCTGCCTTGCATAAGGCCATAATGGTTAAAGGTGTGGATGAAGCAA
CCATCATTGACATTCTAACTAAGCGAAACAATGCACAGCGTCAACAGAT
CAAAGCAGCATATCTCCAGGAAACAGGAAAGCCCCTGGATGAAACACTG
AAGAAAGCCCTTACAGGTCACCTTGAGGAGGTTGTTTTAGCTCTGCTAA
AAACTCCAGCGCAATTTGATGCTGATGAACTTCGTGCTGCCATGAAGGG
CCTTGGAACGTGATGAAGATACTCTAATTGAGATTTTGGCATCAAGAACT
AACAAAGAAATCAGAGACATTAACAGGGTCTACAGAGAGGAACTGAAGA
GAGATCTGGCCAAAGACATAACCTCAGACACATCTGGAGATTTTTCGGAA
CGCTTTGCTTTCTCTTGCTAAGGGTGACCGATCTGAGGACTTTGGTGTG
AATGAAGACTTGGCTGATTCAGATGCCAGGGCCTTGTATGAAGCAGGAG
AAAGGAGAAAGGGGACAGACGTAAACGTGTTCAATACCATCCTTACCAC
CAGAAGCTATCCACAACCTTCGCAGAGTGTTTCAGAAATACACCAAGTAC
AGTAAGCATGACATGAACAAAGTTCTGGACCTGGAGTTGAAAGGTGACA
TTGAGAAATGCCTCACAGCTATCGTGAAGTGCGCCACAAGCAAACCAGC
TTTCTTTGCAGAGAAGCTTCATCAAGCCATGAAAGGTGTTGGAACCTCGC
CATAAGGCATTGATCAGGATTATGGTTTCCCGTTCTGAAATTGACATGA
ATGATATCAAAGCATTCTATCAGAAGATGTATGGTATCTCCCTTTGCCA
AGCCATCCTGGATGAAACCAAAGGAGATTATGAGAAAATCCTGGTGGCT
CTTTGTGGAGGAAACtaagcggccgc