Standard Operating Procedure

Preparation of SV2A S42A S45A S47A [1 - 160]

Enzyme description:-   SV2A S42A S45A S47A [1 - 160]

Clone number:-   DU 39656

Source:-   Recombinant

Expression system:-   *E.coli*

Tag:-   N-terminal GST

Purification method:-   GSH Agarose

Calculated molecular mass:-
Monoisotopic   44, 357.89 daltons
Average Mass   44, 385.97 daltons
[cysteines reduced, methionines have not been oxidised

Theoretical pI:-   4.93

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

Clone Data Sheet

SV2A S42A S45A S47A [1 - 160]

Protein　　　　　SV2A S42A S45A S47A [1 - 160]

Clone number　　DU 39656

Species　　　　　Human

Accession number　AAH45111.1

Tags　　　　　　N-terminal GST

Bacterially expressed protein

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MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELG
LEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLEGA
VLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDH
VTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPQIDKYLKSS
KYIAWPLQGWQATFGGGDHPPKSDLEVLFQGPLGSMEEGFRDRAAFIRG
AKDIAKEVKKHAAKKVVKGLDRVQDEYARRAYARFEEEDDDDFPAPSD
GYYRGEGTQDEEEGGASSDATEGHDEDDEIYEGEYQGIPRAESGGKGER
MADGAPLAGVRGGLSDGEGPPGGRGEAQRRKEREELAQQYEAILRECG
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Native sequence　Amino acids M1 – G160 (Q742 end residue) of human SV2A.
Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.

The protein has an S42A S45A S47A mutation.
Residues S80, S81 and T84 are equivalent to A273, A276 and A278 of the fusion protein.

Protease cleavage　PreScission (LEVLFQGP) residues 221 - 228

Cloning sites　　*Bam*H1 and *Not*1 of pGEX6P