*MRCPPU Reagents and Services*

# Standard Operating Procedure

# Preparation of SV2A S80A S81A T84A [1 - 160]

**Enzyme description:-** SV2A S80A S81A T84A [1 - 160]

**Clone number:-** DU 44015

**Source:-** Recombinant

**Expression system:-** *E.coli*

**Tag:-** N-terminal GST

**Purification method:-** GSH Sepharose

**Calculated molecular mass:-**
Monoisotopic 44, 343.88 daltons
Average Mass 44, 371.94 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

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# Clone Data Sheet

## SV2A S80A S81A T84A [1 - 160]

**Protein** SV2A S80A S81A T84A [1 - 160]

**Clone number** DU 44015

**Species** Human

**Accession number** AAH45111.1

**Tags** N-terminal GST

**Bacterially expressed protein**

MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELG
LEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLEGA
VLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDH
VTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPQIDKYLKSS
KYIAWPLQGWQATFGGGDHPPKSDLEVLFQGPLGS**MEEGFRDRAAFIRG**
**AKDIAKEVKKHAAKKVVKGLDRVQDEYSRRSYSRFEEEDDDDDFPAPSD**
**GYYRGEGTQDEEEGGAAADAAEGHDEDDEIYEGEYQGIPRAESGGKGER**
**MADGAPLAGVRGGLSDGEGPPGGRGEAQRRKEREELAQQYEAILRECG**

**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 S80A S81A T84A mutation.
Residues S80, S81 and T84 are equivalent to A311, A312 and A315 of the fusion protein.

**Protease cleavage** PreScission (LEVLFQGP) residues 221 - 228

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