

Expression & purification of 6his-SmPRMT3(1-553)

Construct

MGSSHHHHHHSSGTGSGENLYFQGHMSPCDQSSNYDLDMEPNDSSYFGSYGHFEIHGEMINDRVRTESYVNFILSN
AEKYFKHKIILDVGS GSGILSIIAAQAGASHVYGVEAADEIYAASHETLRVNNLLERVTFIHGQAESVELPVKKVDVIISE
WMGYFLFFESMLDSVLKMASKYLSRDGHIFPRHYTLNLLGVQCSEQLRKRRLEHWNNVYGYNMPALRRAALSEAHV
LNLTNEHVTPPISPITILTQSFELVALDLDDMHRNRRIYNSNHCSLLCEQKFHLTIQPTTDINNNSSSSSYELDAIVGYFD
VRFDDADCKVEFSTSPPTPLTHWKQTLFLDKPIRVKPGDKISGIITIRRATTDNRGLEINLLIGETENSLEIKQTFDLIG

Length = 396 AA

Molecular weight = 44782.3 Da

pI 5.66

$\xi(\text{red})$ 40340 L.M⁻¹

Expression

Grow p_{nEAvH_SmPRMT3-184} BL21(DE3) transformants on an LB-Amp plate (1 plate/L culture), overnight 37°C. Resuspend cells in LB medium (5 mL/plate) and inoculate liquid **2X** LB medium + 100 µg/mL⁻¹ Ampicilline. Grow culture(s) at 37°C, 200 rpm and measure OD₆₀₀ every 20 minutes. When OD₆₀₀ reaches 0.4, set temperature to 20°C. When OD₆₀₀ reaches 0.6 to 0.8, induce 6his-SmPRMT3(184-553) with 1 mM IPTG and leave the cultures to express the protein overnight.

Purification (for 3L)

Pellet cells by centrifugation (4000 rpm, 45 minutes), then resuspend pellets in 200 mL Lysis buffer

Buffers

Lysis buffer: 50 mM BTP pH9, 250 mM NaCl, 1 mM TCEP, 0.01% NP40, Complete[®]-EDTA free protease inhibitor cocktail (1 pill / 50 mL)

Talon wash buffer: 50 mM BTP pH9, 250 mM NaCl, 1 mM TCEP, 10 mM imidazole

Talon elution buffer: 50 mM BTP pH9, 250 mM NaCl, 1 mM TCEP, 150 mM imidazole

Dilution buffer: 50 mM BTP pH9, 1 mM TCEP, 1 mM EDTA

ANX buffer: 20 mM BTP pH9

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