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Datasheet for ABIN4839745 Human SDS cDNA Clone in Bacterial Expression Vector (His-GST)

Overview

Quantity:	500 ng
Gene:	serine Dehydratase (SDS)
Species:	Human
Fusion tag:	His-GST
Insert:	cDNA
Vector:	Bacterial Expression Vector
Application:	Cloning (Clon)

Product Details

Purpose:	Bacterial expression of Human SDS with His-GST
Insert Length:	657 bp
Vector Backbone:	pPB-His-GST
Promoter:	T7 Promoter
Bacterial Resistance:	Kanamycin
Expression Type:	Transient
Specificity:	5-Nhel and 3-Xhol Fusion tag: Dual N-terminal tag, 6X Histidine followed by Glutathione-S-Transferase Protein which is cleavable with TEV (Size 27.9 kDa)
Sequencing Primer:	GST Forward primer: 5'-CACGTTTGGTGGTGGCGAC3', T7 terminator primer: 5'- GCTAGTTATTGCTCAGCGG-3'

Target Details

Gene:

serine Dehydratase (SDS)

Alternative Name:	SDS (SDS Products)	
Application Details		
Application Notes:	The pPB vectors are low-medium copy number vectors in which the gene expression is driven	
	by the strong T7 promoter.	
	Below are some basic guidelines for using the pPB vectors for protein production:	
	1. The pPB vectors are designed to be used with E. coli strains that are DE3 lysogens i.e. the	
	host E. coli cell has a source of T7 RNA polymerase.	
	2. Recombinant protein induction is usually done at OD600 of 0.6-1.2 using Isopropyl β -D-1-	
	thiogalactopyranoside (IPTG) at a final concentration of 0.05 -1mM.	
	3. The ideal concentration of IPTG must be determined empirically for each recombinant	
	protein/cell-line. Similarly, the length of time and temperature for induction provide other	
	variables that need to be optimized on a case-to-case basis.	
	4. For toxic proteins, it is recommended to go for shorter induction time and also to try and	
	suppress basal recombinant gene expression through (a) addition of glucose or use of pLysS	
	plasmid. Please note that special cell-lines are also available in the market that cater to	
	expression of toxic proteins.	
	5. Once grown for the desired length of time, harvest cells by centrifugation and either freeze	
	the cells at -80°C (as such or after re-suspending in the desired buffer) or proceed with the	
	purification.	
Restrictions:	For Research Use only	
Handling		

Handling

Target Details

Format:	Liquid
Buffer:	10 mM Tris-HCl, 1 mM EDTA, pH 8.0
Storage:	-20 °C
Storage Comment:	1 year when stored at -20° C or lower in a non-frost free freezer.
Expiry Date:	12 months
Publications	
Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)