



Mo Bi Tec

MOLECULAR BIOLOGISCHE TECHNOLOGIE

Data Sheet

Product:	pMAMPF3-PSTI4 vector DNA
Cat. No.:	PSKAN4
Lot No.:	001
Amount:	5 µg lyophilized DNA
Host strain:	<i>E. coli</i> WK6 , <i>E. coli</i> JM103, <i>E. coli</i> TG1 Note: do not use a λ -lysogen (such as <i>E. coli</i> WK6 λ mutS) as a host. The strong λ -repressor would not allow the expression of the PSTI protein, which is under control of the λ -promoter P _L .
Comments:	<p>The pMAMPF3-PSTI4 vector encodes a variation of the hPSTI protein (human Secretory Pancreatic Trypsin Inhibitor). hPSTI presents the hypervariable amino acid loop in MoBiTec's pSKAN Phagemid Display System. Thus, pMAMPF3-PSTI4 can be utilized to produce a soluble hPSTI protein with the desired binding characteristics. For this purpose, the DNA sequence of the hPSTI loop in pMAMPF3 has to be exchanged by the sequence of the phage selected during the pSKAN system panning procedure. It is advisable to cleave pSKAN as well as pMAMPF3 at the unique recognition sites of the restriction enzymes Sal I and Kpn I. The resulting 174 bp fragment is easy to clone and includes the amino acid loop of interest.</p> <p>The PSTI4 expressed by pMAMPF3-PSTI4 can serve as a control during the size selection of the recombinant protein with the amino acid loop of interest. PSTI4 has a MW of 6.1 kDa and is an inhibitor for chymotrypsin (bovine pancreas; $K_i=2.4 \times 10^{-11}$ M) and human leukocyte elastase ($K_i=3.7 \times 10^{-11}$ M), which can be verified by standard enzyme assays.</p>
References:	Szardenings M. & Collins, J., Gene 94 (1990) pg 1-7
Storage:	Store at 4°C.