



PPT N-acetyltransferase Recombinant Protein

CATALOG NUMBER: 92-657

Specifications

SPECIES:	S. hygroscopicus
SOURCE SPECIES:	E. coli
SEQUENCE:	Met1-Ile183
FUSION TAG:	Tag Free
APPLICATIONS:	This recombinant protein can be used for biological assays. For research use only.

Properties

PURITY:	Greater than 95% as determined by reducing SDS-PAGE. Endotoxin level less than 0.1 ng/ug (1 IEU/ug) as determined by LAL test.
PREDICTED MOLECULAR WEIGHT:	20.6 kD
PHYSICAL STATE:	Lyophilized
BUFFER:	Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4. It is not recommended to reconstitute to a concentration less than 100 ug/ml. Dissolve the lyophilized protein in ddH ₂ O.
STORAGE CONDITIONS:	Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

Additional Info

ALTERNATE NAMES:	Phosphinothricin N-acetyltransferase, PPT N-acetyltransferase, Phosphinothricin-resistance protein, bar
ACCESSION NO.:	P16426

Background

Phosphinothricin N-acetyltransferase (PAT) is an enzyme that acetylates the free NH₂ group of L-phosphinothricin (L-PPT) in the presence of acetyl-CoA as a co-substrate. It is highly specific for L-PPT and does not acetylate other L-amino acids or structurally similar molecules. L-PPT is a glutamate analog that can inhibit glutamine synthetase activity in plants, resulting in the accumulation of ammonia to toxic levels and impairment of photosynthesis. The introduction of a PAT gene into a plant genome can confer resistance to glufosinate herbicide during post-emergent applications.

FOR RESEARCH USE ONLY

December 14, 2016