Recombinant Streptomyces hygroscopicus Bar Protein

Catalog Number: PKSQ050087

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

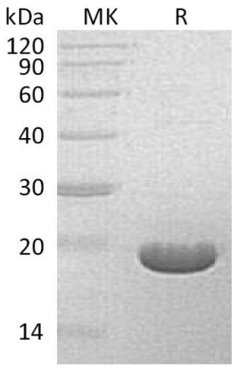
Description

Species	Streptomyces hygroscopicus
Mol_Mass	20.6 kDa
Accession	P16426
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of 12.5mM Tris-HCl, 50mM NaCl, 5% Trehalose, 5% Mannitol, 0.01% Tween 80, 2mM DTT, 1mM EDTA, pH8.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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