

## 32-8732: Recombinant Streptomyces hygroscopicus Phosphinothricin N-acetyltransferase/Bar

**Gene :** bar  
**Uniprot ID :** P16426

### Description

Source: E.coli.  
MW :20.6kD.

Recombinant *S. hygroscopicus* PPT N-acetyltransferase is produced by our E.coli expression system and the target gene encoding Met1-Ile183 is expressed. Phosphinothricin N-acetyltransferase (PAT) is an enzyme that acetylates the free NH<sub>2</sub> 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.  
**Storage condition :** 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.  
**Amino Acid :** MSPERRPADIRRATEADMPAVCTIVNHYIETSTVNFRTPEPQEPQEWTDLVLRLRERYPWLVAEVDGEVAGIAYA  
GPWKARNAYDWTAEVYVSPRHQRTGLGSTLYTHLLKSLEAQGFKSVVAVIGLPNDPSVRMHEALGYAPRG  
MLRAAGFKHGNWHDVGFVQDFSLPVPVPPVLPVTEI

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.