Datasheet

Product overview

Name
Pertussis Toxin

Cat No
HB4729

Short description
Catalyzes ADP-ribosylation of the G proteins Gαi, Gαo and Gαt

Biological description
Toxin produced by Bordetella pertussis. Catalyzes ADP-ribosylation of the α subunits of the heterotrimeric Gαi/o proteins; Gαi, Gαo and Gαt. Blocks receptor coupling and activation by preventing G protein heterotrimers from interacting with receptors.

This product is not activated. Cells will activate pertussis toxin in an intact system however activation is required in a cell free system. Incubation with high concentrations of dithiothreitol (DTT) can achieve activation, see Kaslow, et al. (1987) for suggested conditions.

Alternative names
PTX | PT | Islet-activating protein | Holotoxin

Biological action
Activator

Purity
>98%

Properties

CAS Number
70323-44-3

Source
B. pertussis

Appearance
Lyophilised

Formulation
Contains 0.05M sodium phosphate and 0.5M sodium chloride at pH 7.2.

Storing and Using Your Product

Storage instructions
+4 °C for lyophilised or resuspended (do not freeze)

Handling
Use solutions within 1 month, long term storage is not recommended.

Before use the suspension should be gently mixed (not vortexed) to make the suspension uniform. Do not sterile filter.

Important
Pertussis toxin can be inactivated by boiling for 30mins

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Pertussis Toxin
Subunit structure of islet-activating protein, pertussis toxin, in conformity with the A-B model.
PubMedID: 6293544

Structure-activity analysis of the activation of pertussis toxin.
PubMedID: 3030399

G(i/o) protein-dependent and -independent actions of Pertussis Toxin (PTX).
Mangmool and Kurose (2011) Toxins (Basel) 3(7) : 884-99
PubMedID: 22069745