



Anti-Botulinum Toxin A Polyclonal antibody (DPAB2078)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit polyclonal to bacteria botulinum toxin A.
Antigen Description	The toxins produced by various strains of Clostridium botulinum are the strongest biotoxins known. In humans these toxins are responsible for food poisoning (botulism) caused by the growth of the bacterium under anaerobic conditions e.g. in canned food. The poisoning manifests itself as a symmetrical paralysis culminating in death caused by respiratory failure. The toxins are produced as binary proteins that possess a heavy chain (approximately 100kDa) and a light chain (approximately 50kDa). The heavy chain is a binding component that directs the toxin to vulnerable cells, and the light chain is an enzyme that has mono (ADP-ribosyl) ating activity. The toxins are divided into 7 groups named A, B, C, D, E, F, and G where A, B, E, and F are associated with human disease and C and D mainly with disease in animals (cattle). Type G is not known to cause human disease.
Specificity	In an ELISA testing against toxins A through F this serum reacts primarily with A toxoid and has a cross reactivity with B toxoid. However, type protection in a mouse bioassay (cf. table below) is monospecific for the A toxin. Western blot analyses show t
Target	Botulinum Toxin A
Immunogen	Type A botulinum toxin treated with formaldehyde for detoxification.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Botulinum
Conjugate	Unconjugated
Applications	ELISA, WB

Preparation	Sterile filtered, 0.22 µm pore size
Concentration	~10 mg/ml
Preservative	None
Storage	4-8°C.

BACKGROUND

Introduction	<p>Botulinum toxin is a protein produced by the bacterium <i>Clostridium botulinum</i>, and is considered the most powerful neurotoxin ever discovered. Botulinum toxin causes Botulism poisoning, a serious and life-threatening illness in humans and animals. When introduced intravenously in monkeys, type A (Botox Cosmetic) of the toxin exhibits an LD50 of 40-56ng, type C1 around 32ng, type D 3200ng, and type E 88ng, rendering the above types some of the most powerful neurotoxins known. Popularly known by one of its trade names, Botox or Dysport or Xeomin, it is used for various cosmetic and medical procedures.</p>
Keywords	botulinum toxin A; Botulinum Toxin A