# PRODUCT SPECIFICATION

## POL 005 Anti Botulinum Toxin E

*Rabbit polyclonal antibody*

<table>
<thead>
<tr>
<th>Article No.</th>
<th>51477</th>
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<tbody>
<tr>
<td><strong>Product Name</strong></td>
<td>POL 005 Anti Botulinum Toxin E</td>
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<tr>
<td><strong>Batch</strong></td>
<td>03084Rab</td>
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### Description

- **Preparation:** Sterile filtered, 0.22 μm pore size
- **Content:** 10 ml ~10 mg/mL IgG
- **Solvent:** Serum with 15 mM NaN₃
- **Storage:** 2–8 ºC

### Antigen

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 100 kDa) and a light chain (approximately 50 kDa). 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.

### Immunogen

Type E botulinum toxin treated with formaldehyde for detoxification.

### Specificity

In an ELISA testing against botulinum toxin A through F, this serum reacts with toxin type E as well as type F and it has weak cross reactivity with type B toxin. However, type protection in a mouse bioassay is monospecific for the type E toxin.

### Epitope Specificity

Not determined.

### Reactivity

In a Botulinum toxin type E ELISA coated with 0.1 μg toxin/well the titre of this serum is 1:200 – 1:400. Inhibitory activity in the mouse bioassay is specific for lethal doses of botulinum toxin type E at a serum dilution of 1:100.

### Immunization

Rabbits were subcutaneously immunized with toxoid together with Freund's complete adjuvant and Al(OH)₃ initially and then likewise but with Freund's incomplete adjuvant in subsequent immunizations.

### Application

<table>
<thead>
<tr>
<th>Method</th>
<th>Usability</th>
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<tbody>
<tr>
<td>ELISA</td>
<td>yes</td>
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<tr>
<td>Immunoblotting</td>
<td>nd.</td>
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<td>Immuno fluoresc.</td>
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### References