PRODUCT SPECIFICATION

POL 003 Anti Botulinum Toxin C
Rabbit polyclonal antibody

Table:

<table>
<thead>
<tr>
<th>Article No.</th>
<th>51475</th>
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<tbody>
<tr>
<td>Product Name</td>
<td>POL 003 Anti Botulinum Toxin C</td>
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<tr>
<td>Batch</td>
<td>03082Rab</td>
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</tbody>
</table>
| Description     | Preparation: Sterile filtered, 0.22 μm pore size  
|                 | Content: 10 ml ~10 mg/mL IgG  
|                 | Solvent: Serum with 15 mM NaN$_3$  
|                 | 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 (1).

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 C botulinum toxin treated with formaldehyde for detoxification.

Specificity:
In an ELISA testing against botulinum toxin A through F, this serum reacts with type C toxin and it has cross reactivity with type D toxin. Protection for toxin type C in a mouse bioassay has been observed.

Epitope Specificity:
Not determined.

Reactivity:
In a Botulinum toxin type C ELISA coated with 0.1 µg toxin/well the titre of this serum is 1:2500 – 1:5000. Inhibitory activity in the mouse bioassay is specific for lethal doses of botulinum toxin type C and D 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>
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<tr>
<th>Method</th>
<th>Usability</th>
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<tbody>
<tr>
<td>ELISA</td>
<td>yes</td>
</tr>
<tr>
<td>Immunoblotting</td>
<td>nd</td>
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<tr>
<td>Immuno.fluoresc.</td>
<td>nd</td>
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References:

Conditions:
For research use only. Not for use in diagnostic procedures.
The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.