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## Product Information

### Botulinum Toxin B solution from *Clostridium botulinum*

Product Number **B 6403**  
Storage Temperature -20 °C

#### Product Description

CAS Number: 93384-44-2

$\lambda_{\max}$ : 278 nm

Extinction coefficient:  $E^{0.1\%} = 1.85$

(0.1 M phosphate buffer, pH 5.7)

Fluorescent properties (0.1 M Tris-HCl, pH 8.0):

Excitation wavelength: 287 nm

Emission wavelength: 323 nm

The isolation and characterization of this material has been reported.<sup>1,2,3</sup> It has a molecular weight of 167 kDa and is composed of two subunits having molecular weights of 59 kDa and 104 kDa.<sup>1</sup> Botulinum toxins A, B, and D have been reported to inhibit catecholamine secretions.<sup>4</sup> Botulinum toxin B has been used to study neuropathic pain,<sup>5</sup> spasticity,<sup>6</sup> and dystonia.<sup>7</sup>

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is supplied as a solution in 0.05 M sodium acetate, pH 6.0, with 0.2 M sodium chloride.

#### Storage/Stability

Solutions may be stored as aliquots at -20 °C for long-term storage.

#### References

1. Beers, W. H., and Reich, E., Isolation and characterization of *Clostridium botulinum* type B toxin. J. Biol. Chem., **244**(16), 4473-4479 (1969).
2. Kozaki, S., et al., Purification and some properties of progenitor toxins of *Clostridium botulinum* type B. Infect. Immun., **10**(4), 750-756 (1974).
3. Simpson, L. L., et al., Isolation and characterization of the Botulinum neurotoxins. Methods Enzymol., **165**, 76-85 (1988).
4. Knight, D. E., Botulinum toxin types A, B and D inhibit catecholamine secretion from bovine adrenal medullary cells. FEBS Lett., **207**(2), 222-226 (1986).
5. Argoff, C. E., A focused review on the use of botulinum toxins for neuropathic pain. Clin. J. Pain, **18**(6 Suppl.), S177-S181 (2002).
6. Brashear, A., et al., Treatment with botulinum toxin type B for upper-limb spasticity. Arch. Phys. Med. Rehabil., **84**(1), 103-107 (2003).
7. Arimitsu, H., et al., Purification of fully activated *Clostridium botulinum* serotype B toxin for treatment of patients with dystonia. Infect. Immun., **71**(3), 1599-1603 (2003).

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