

Product datasheet for **DM1233**

Clostridium botulinum Toxin B Mouse Monoclonal Antibody [Clone ID: GR3G7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	GR3G7
Applications:	ELISA, FC, WB
Recommended Dilution:	Flow cytometry: 1.2 µg/10 ⁶ cells. Cell based ELISA with intact, transiently transfected cells: 1/200-1/400.
Reactivity:	Clostridium botulinum
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Genetic immunisation with cDNA encoding BoNT/B.
Specificity:	Recognizes Botulinum Neurotoxin type B (BoNT/B).
Formulation:	Phosphate buffered saline, pH 7.2 State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



[View online »](#)

Background:

Botulinum neurotoxin type B (BoNT/B) is produced by *Clostridium botulinum*, a genetically diverse class of anaerobic, spore-forming, gram-positive bacilli. Seven different botulinum toxin groups have been identified serologically and are called botulinum toxin type A,B,C,D,E,F, and G. BoNT/B is a two-chain polypeptide with a 100-kDa heavy chain, which is responsible for neurospecific binding joined by a disulphide bond to a 50-kDa light chain, a zinc-endopeptidase which blocks neurotransmitter release. BoNT/B is one of the most poisonous naturally occurring substances. It inhibits acetylcholine release from neuromuscular junctions while it is used as an important therapeutic mainstay in the treatment of spasticity disorders and as a cosmetic treatment.

Synonyms:

Botulinum Neurotoxin type B, Bontoxilysin B, Bot B, BoNT/B

Note:**SDS-PAGE analysis of GR-3G7:**

The antibody was purified by protein G affinity chromatography from cell culture supernatants and verified by SDS-Page (Figure.3).

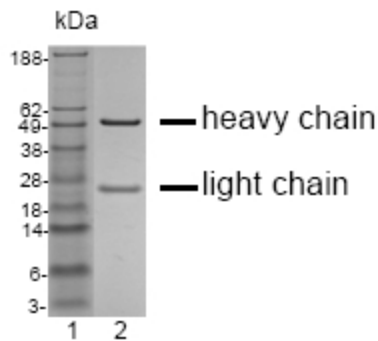
Product images:

Figure 3. SDS-PAGE analysis of purified GR-3G7 monoclonal antibody. Lane 1: Molecular Weight marker Lane 2: 2 g of purified GR-3G7 antibody. Proteins were separated by SDS-PAGE and stained with RAPID Stain™ Reagent.

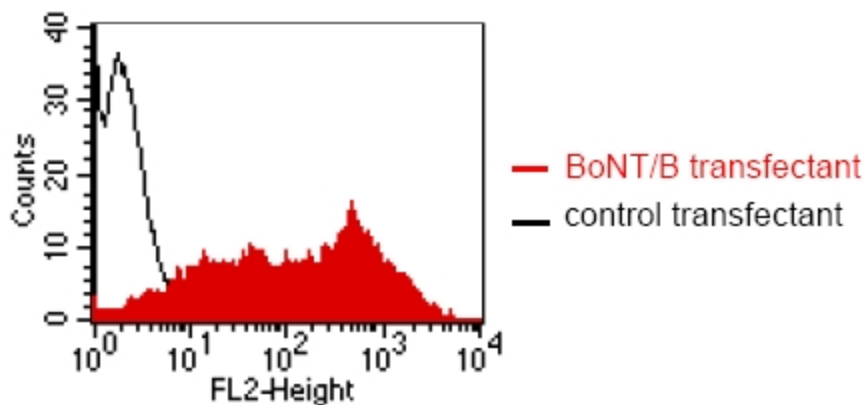


Figure.1: FACS analysis of BOSC23 cells using GR-3G7 (Cat.#DM1233). BOSC23 cells were transiently transfected with an expression vector encoding either CGA (Red curve) or an irrelevant protein (Control transfectant: black curve). Binding of GR-3G7 was detected.

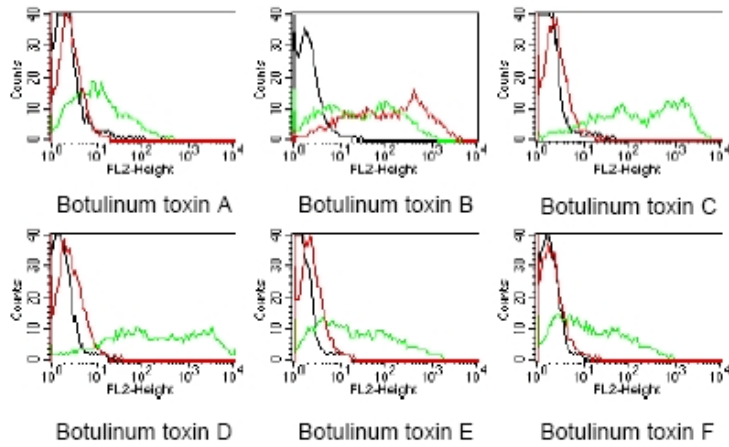


Figure.2: Antibody cross-reactivity with members of the Botulinum toxin family: BOSC23 cells were transiently transfected with expression vectors containing the cDNA of the lightchain of botulinum toxin A-F. Expression of the constructs was tested with an an