

Biotin-XX- α -Bungarotoxin

A high affinity inhibitor of the nicotinic acetylcholine receptor in the neuromuscular junction. Blocks acetylcholine activity at the postsynaptic membrane. The biotin conjugate can be subsequently labeled with anti-biotin antibodies, avidin, or streptavidin for signal amplification.



Product Description

A potent neurotoxin that is an inhibitor for the motor endplate acetylcholine receptor ($K_d = 1 \text{ nM}$ to 1 pM). It binds at the neuromuscular junction with high affinity and is often used to study neuromuscular junctions by blocking cholinergic receptors. The toxin also blocks $\alpha 7$ receptors, located in the central and peripheral nervous systems. The biotin conjugate can be subsequently labeled with anti-biotin antibodies, avidin, or streptavidin for signal amplification.

- A polypeptide snake toxin
- Blocks and inhibits cholinergic receptors
- Biotinylated for avidin or streptavidin reactivity and signal amplification
- White solid soluble in water

Biotinylated α -bungarotoxin is useful in the affinity column isolation of the nicotinic AChR using an avidin or streptavidin agarose (1). Nicotinic AChR labeled with biotin-XX- α -bungarotoxin can be localized using enzyme or fluorophore-labeled conjugates of avidin or streptavidin (2,3). Alpha-bungarotoxin may also be used for detection of GABA A receptor subsets in cells (4), or for labeling recombinant proteins that express the alpha-bungarotoxin binding site (BBS) epitope tag (5).

We also offer [unlabeled \$\alpha\$ -bungarotoxin](#) and [CF® Dye \$\alpha\$ -Bungarotoxin](#) conjugated to our next-generation fluorescent dyes. See our complete selection of α -Bungarotoxin Products below.

Product attributes

Toxin	Alpha-bungarotoxin
For live or fixed cells	For fixed cells, For live/intact cells
Assay type/options	Tissue staining
Cell permeability	Membrane impermeant
Detection method/readout	Microscopy
Fixation options	Fix before staining (formaldehyde), Fix before staining (methanol), Permeabilize before staining
Conjugation	Biotin
Storage Conditions	Store at -10 to -35 °C, Protect from light

α -Bungarotoxin, CF® Dye and Other Conjugates

Conjugation	Ex/Em	Size	Catalog No.	Dye Features
Unconjugated	N/A	1 mg	00010-1	
Biotin-XX	N/A	0.5 mg	00017	
_CF@405S	411/431 nm	100 ug	00002-100ug	CF@405S Features
0.5 mg	00002			
CF@488A	490/516 nm	100 ug	00005-100ug	CF@488A Features
0.5 mg	00005			
CF@543	543/563 nm	100 ug	00026-100ug	CF@543 Features
0.5 mg	00026			
CF@555	554/568 nm	100 ug	00018-100ug	CF@555 Features
0.5 mg	00018			
CF@568	562/584 nm	100 ug	00006-100ug	CF@568 Features
0.5 mg	00006			
CF@594	593/615 nm	100 ug	00007-100ug	CF@594 Features
0.5 mg	00007			
CF@633	629/650 nm	100 ug	00009-100ug	CF@633 Features
0.5 mg	00009			
CF@640R	642/663 nm	100 ug	00004-100ug	CF@640R Features
0.5 mg	00004			
CF@680R	680/701 nm	100 ug	00003-100ug	CF@680R Features
0.5 mg	00003			
Fluorescein (FITC)	498/517 nm	0.5 mg	00011	
10 x 50 ug	00013			
Tetramethylrhodamine (TRITC)	552/578 nm	0.5 mg	00012	
10 x 50 ug	00014			
Sulforhodamine-101 (Texas Red®)	595/613 nm	0.5 mg	00015	
10 x 50 ug	00016			

CF is a registered trademark of Biotium, Inc. Texas Red is a registered trademark of Thermo Fisher Scientific.

References

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