Product Information

α-Bungarotoxin, CF® Dye Conjugates

Catalog Number	Unit Size	Conjugate	Abs/Em (nm)
00002-100ug	100 ug	CF®405S	404/431
00002	0.5 mg		
00005-100ug	100 ug	CF®488A	490/515
00005	0.5 mg		
00026-100ug	100 ug	CF®543	541/660
00026	0.5 mg		
00018-100ug	100 ug	CF®555	555/565
00018	0.5 mg		
00006-100ug	100 ug	CF®568	562/583
00006	0.5 mg		
00007-100ug	100 ug	CF®594	593/614
00007	0.5 mg		
00009-100ug	100 ug	CF®633	630/650
00009	0.5 mg		
00004-100ug	100 ug	CF®640R	642/662
00004	0.5 mg		
00003-100ug	100 ug	CF®680R	680/701
00003	0.5 mg		

Storage and Handling

Store at -20°C and protect from light, especially when in solution. Product is stable for at least 1 year from date of receipt when stored as recommended. Stock solutions can be prepared in PBS at 0.5 mg/mL and stored at 4°C for at least 6 months, or in single use aliquots at -20°C for longer term storage. Avoid multiple freeze-thaw cycles.

Spectral Properties

See table above.

Product Description

α-Bungarotoxin is a polypeptide snake toxin that binds to the nicotinic acetylcholine receptor found at the neuromuscular junction with high affinity. Fluorescent conjugates of α-bungarotoxin can be used for fluorescence imaging of nicotinic acetylcholine receptors at neuromuscular junctions. CF® dyes are superior dyes with exceptional brightness and remarkable photostability.

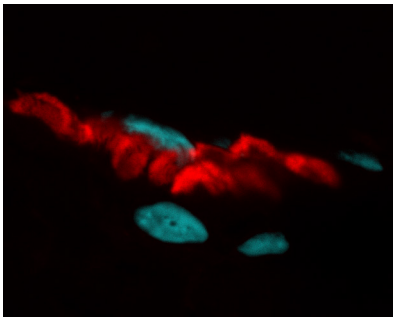

Figure 1. Fresh frozen section of rat skeletal muscle stained with CF®594 α-bungarotoxin (red). Nuclei are counterstained blue with DAPI.

Staining Protocol

The following is an example protocol for staining 10 um-thick fresh-frozen cryosections of rat skeletal muscle with fluorescent α-bungarotoxin conjugates, and may require optimization for other applications. For combined immunofluorescence and α-bungarotoxin staining, α-bungarotoxin conjugates can be incubated together with fluorescently labeled secondary antibodies.

1. Fix fresh-frozen sections in 4% paraformaldehyde in PBS for 15 minutes at room temperature. Alternatively, sections can be fixed in ice-cold methanol for 5 minutes at -20°C. Rinse 3X with PBS.
2. Permeabilize sections with PBS/0.1% Triton X-100 for 10 minutes at room temperature. Permeabilization is not required for methanol-fixed sections.
3. Prepare staining solution of 1 ug/mL α-bungarotoxin in PBS. The conjugate can also be diluted in an immunofluorescence blocking buffer.
4. Overlay sections with enough staining solution to completely cover the tissue. A Parafilm® coverslip can be placed on top of the staining solution to evenly spread the solution over the section.
5. Incubate in a dark, humid chamber for at least 15 minutes at room temperature.
6. Rinse several times in PBS.
7. Mount in fluorescence antifade mounting medium and coverslip.

Related Products

Catalog number	Product
22023	Paraformaldehyde, 4% in PBS Ready-to-Use Fixative
23001	EverBrite™ Mounting Medium
23002	EverBrite™ Mounting Medium with DAPI
23003	EverBrite™ Hardset Mounting Medium
23004	EverBrite™ Hardset Mounting Medium with DAPI
23008	Drop-n-Stain EverBrite™ Mounting Medium
23009	Drop-n-Stain EverBrite™ Mounting Medium with DAPI
23005	CoverGrip™ Coverslip Sealant
22005	Mini Super^{HT} Pap Pen 2.5 mm tip, ~400 uses
22006	Super^{HT} Pap Pen 4 mm tip, ~800 uses
40061-T	RedDot™2 Far Red Nuclear Counterstain, 200X in DMSO
23012	TrueBlack® IF Background Suppressor System (Permeabilizing)
22010	10% Fish Gelatin Blocking Buffer
22014	30% Bovine Serum Albumin Solution
22002	Tween®-20

Please visit www.biotium.com to view our full selection of products featuring bright and photostable fluorescent CF® dyes, including secondary antibodies, phalloidins and other conjugates, Mix-n-Stain™ antibody labeling kits, and many more innovative fluorescent dyes and assays for life science research.