Product datasheet

protag-HiRes anti-RFP-X4 Atto 488

Short overview

Cat. No.	82405L
Quantity	200 µl

Product description

Host	Llama/alpaca
Antibody Type	Recombinant, produced in E.coli
Isotype	Single-domain antibody
Clone	2B12/ 2A1
Immunogen	RFP
Formulation	1.25 µM of each fluorescently labeled single-domain antibody clone in buffered saline, 50% glycerol, 0.09% sodium azide; 5 µM total fluorophore concentration
Note	Centrifuge prior to opening
Conjugate	Atto 488
Purification	Affinity chromatography
Storage	Up to 3 months: -20°C; up to 12 months: -80°C or below; protect from light!
Intended use	Research use only
Application	ICC/IF
Reactivity	dsRed1/dsRed2, mCherry, mOrange2, mRFP, mScarlet-i, tdTomato
No reactivity	Dendra2, Dronpa, tdEOS, mEOS3.2, mRuby3, mTFP, GFP, mTagBFP or their most common derivatives

Applications

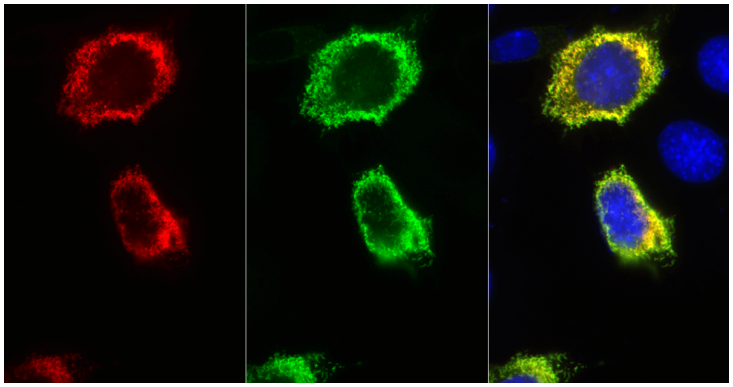
Immunocytochemistry (ICC)	1:500

Background

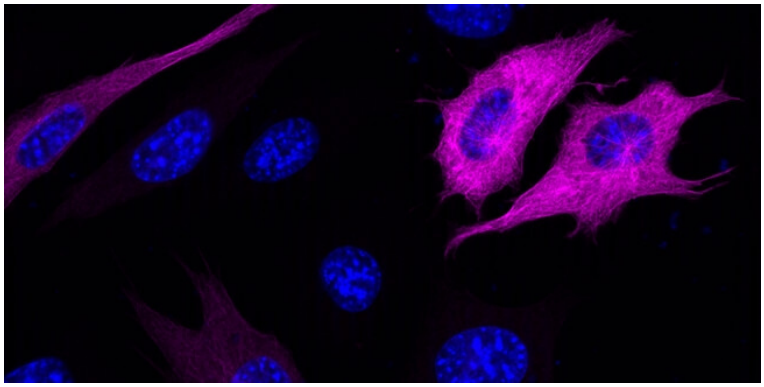
protag-HiRes anti-RFP is a blend of two camelid single-domain antibody (sdAb) produced by NanoTag Biotechnologies GmbH. It is ideal to detect mRFP and mCherry.

In protag-HiRes anti-RFP-X4, two fluorophore molecules are site-specifically coupled to each individual single-domain antibody. The blend of two camelid single-domain antibodies therefore simultaneously targets up to four fluorophores to the protein of interest, which ensures extra-bright signals. Owing to the small size of our protag single-domain antibodies, the distance between the target epitope and each fluorophore is below 4 nm. In comparison to conventional detection systems using conventional antibodies, our protag-HiRes anti-RFP-X4 can thus improve the localization accuracy by 10-15 nm. Both features - superior brightness and precise fluorophore placement - render our protag-HiRes anti-RFP-X4 products excellent tools for all microscopy techniques.

Product images



Immunostaining of PFA fixed 3T3 cells expressing a TOM70-mCherry reporter protein with protag-HiRes anti-RFP-X4 Atto 647N (dilution 1:500, the mCherry signal is represented in red, the corresponding protag-HiRes signal is represented in green and the merge of both channels is represented in yellow). Nuclei were visualized by DAPI staining (blue)(courtesy of NanoTag Biotechnologies GmbH).



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