Product datasheet

protag-HiRes anti-RFP-X1 Atto 488

Short overview

Cat. No.	82105L
Quantity	200 µl

Product description

Host	Llama/alpaca
Antibody Type	Recombinant, produced in E.coli
Isotype	Single-domain antibody
Clone	2B12
Immunogen	RFP
Formulation	5 µM fluorescently labeled single-domain antibody in buffered saline, 50% glycerol, 0.09% sodium azide
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

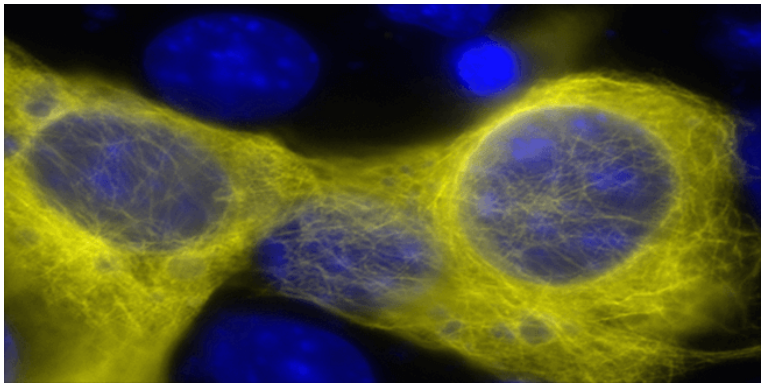
Immunocytochemistry (ICC)	1:500

Background

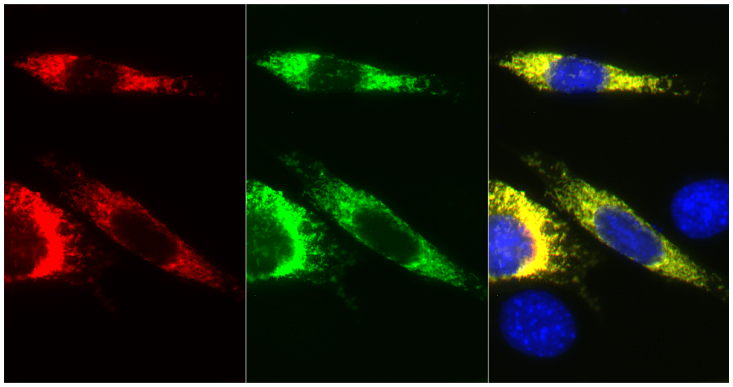
protag-HiRes anti-RFP camelid single-domain antibody (sdAb) produced by NanoTag Biotechnologies GmbH. It recognizes RFP and its most common derivatives with high affinity and specificity. It recognizes mOrange2, dsRed1, dsRed2, tdTomato, mRFP, mCherry, mScarlet-i.

In protag-HiRes anti-RFP-X1, each fluorophore is coupled to exactly one single-domain antibody, which in turn binds to its target molecule in a monovalent fashion. The high binding affinity and a high coupling efficiency of > 95% guarantees a highly linear relation between target molecule number and fluorescent intensity. This enables you to directly count your target molecule of interest. The fluorophore is located exceptionally close to the recognized epitope (< 1.5 nm), which is ideal for all microscopy techniques.

Product images



3T3 cells transfected with the mCherry-tubulin were stained with protag-HiRes anti-RFP-X1 Atto 542 (false color)(courtesy of NanoTag Biotechnologies GmbH).



Immunostaining of PFA fixed 3T3 cells expressing a TOM70-mCherry reporter protein with protag-HiRes anti-RFP-X1 Atto 488 (Cat. No. 82105L, 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).