

# Product datasheet

## protag-HiRes anti-TagFP-X2 Atto 488

### Short overview

<b>Cat. No.</b>	83205L
<b>Quantity</b>	200 µl

### Product description

<b>Host</b>	Llama/alpaca
<b>Antibody Type</b>	Recombinant, produced in E.coli
<b>Isotype</b>	Single-domain antibody
<b>Clone</b>	1H7
<b>Immunogen</b>	TagFP
<b>Formulation</b>	2.5 µM fluorescently labeled single-domain antibody in buffered saline, 50% glycerol, 0.09% sodium azide
<b>Note</b>	Centrifuge prior to opening
<b>Conjugate</b>	Atto 488
<b>Purification</b>	Affinity chromatography
<b>Storage</b>	Up to 3 months: -20°C; up to 12 months: -80°C or below; protect from light!
<b>Intended use</b>	Research use only
<b>Application</b>	ICC/IF
<b>Reactivity</b>	mKate/mKate2, mTagBFP, mTagRFP, mTagRFP657
<b>No reactivity</b>	Dendra2, Dronpa, tdEOS, mEOS3.2, mRuby3, mTFP, GFP, dsRed or their most common derivatives

### Applications

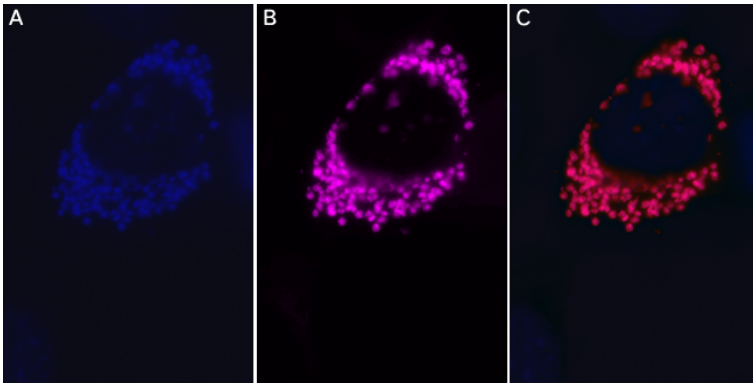
<b>Immunocytochemistry (ICC)</b>	1:500
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### Background

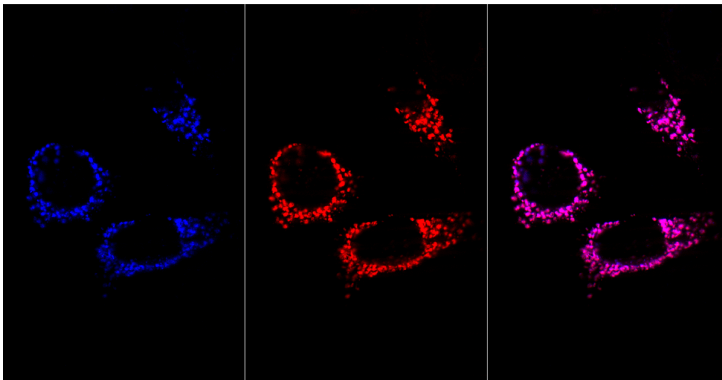
protag-HiRes anti-TagFP camelid single-domain antibody (sdAb) produced by NanoTag Biotechnologies GmbH. It recognizes fluorescent proteins derived from Entacmaea quadricolor, such as mTagBFP, mTagRFP, mTagRFP657, mKate and mKate2 with high affinity and specificity.

In protag-HiRes anti-TagFP-X2, two fluorophore molecules are site-specifically coupled to each individual single-domain antibody. protag-HiRes anti-TagFP-X2 can therefore simultaneously target two fluorophores to your protein of interest, which results in enhanced image brightness. Owing to the small size of our 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, the protag-HiRes anti-TagFP-X2 can thus improve the localization accuracy by 10-15 nm. Both features - enhanced brightness and precise fluorophore placement - render the protag-HiRes anti-TagFP-X2 products superior tools for all microscopy techniques.

## Product images



protag-HiRes anti-TagFP-X2 Atto 488



Immunostaining of PFA fixed 3T3 cells expressing a TOM70-BFP reporter protein with protag-HiRes anti-TagFP-X2 Abberior Star 580 (dilution 1:500, the BFP signal is represented in blue, the corresponding protag-HiRes signal is represented in red and the merge of both channels is represented in magenta)(courtesy of NanoTag Biotechnologies GmbH).