

## Product datasheet

### protag-HiRes anti-TagFP-X2 AF568

#### Short overview

<b>Cat. No.</b>	83211L
<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>	AF568
<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

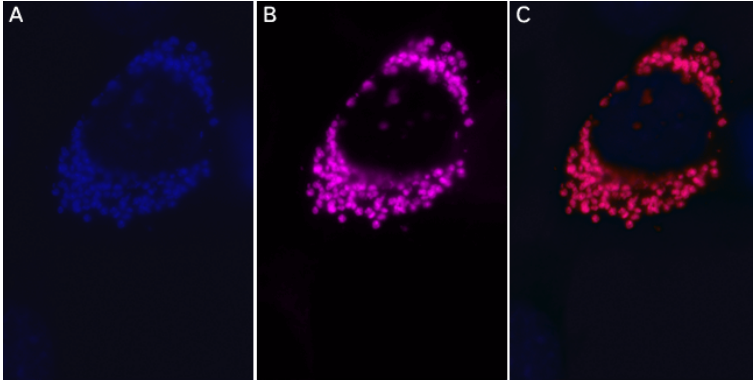
<b>Immunocytochemistry (ICC)</b>	1:500
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#### Background

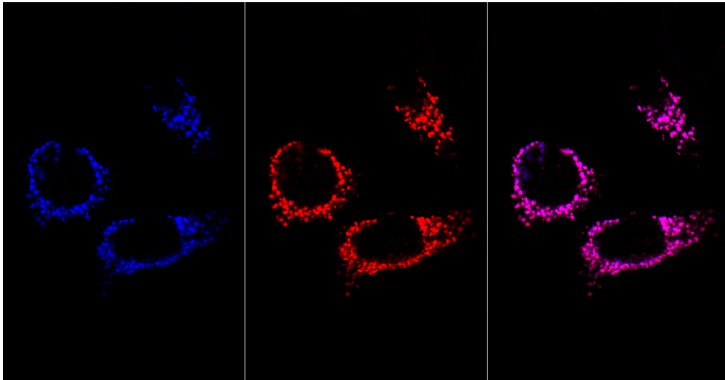
protag-HiRes anti-TagFP camelid single-domain antibody (sdAb) produced by NanoTag Biotechnologies GmbH. It recognizes fluorescent proteins derived from *Entacmaea quadricolor*, such as mTagBFP, mTagRFP, mTagRFP657, mKate and mKate2 with high affinity and specificity.

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 AF568



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).