

## Product datasheet

### protag-HiRes anti-GFP-X1 Atto 488

#### Short overview

<b>Cat. No.</b>	81105L
<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>	1H1
<b>Immunogen</b>	GFP
<b>Formulation</b>	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>	Cerulean, Citrine, EGFP, Emerald GFP, GFP, Sirius, Superecliptic pHluorin, Superfold GFP, acGFP, eCFP, eYFP, mEGFP (A206K), mEGFP (L221K), mTurquoise 1/2, mVenus, paGFP, tSapphire
<b>No reactivity</b>	Dendra2, Dronpa, tdEOS, mEOS3.2, mRuby3, mTFP, mCherry, mRFP, dsRed, mTagBFP or their most common derivatives

#### Applications

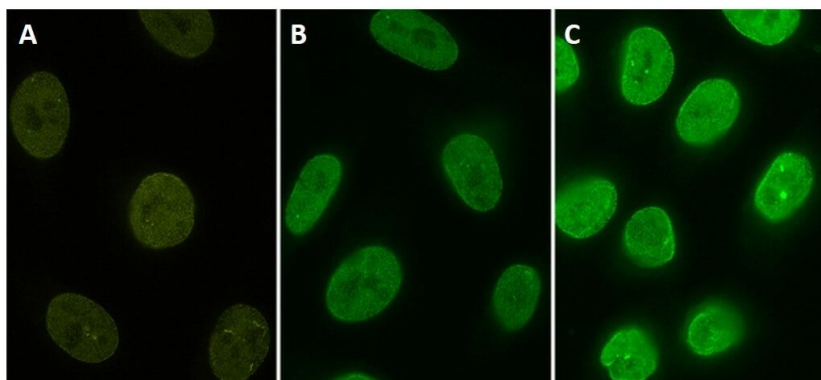
<b>Immunocytochemistry (ICC)</b>	1:500
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#### Background

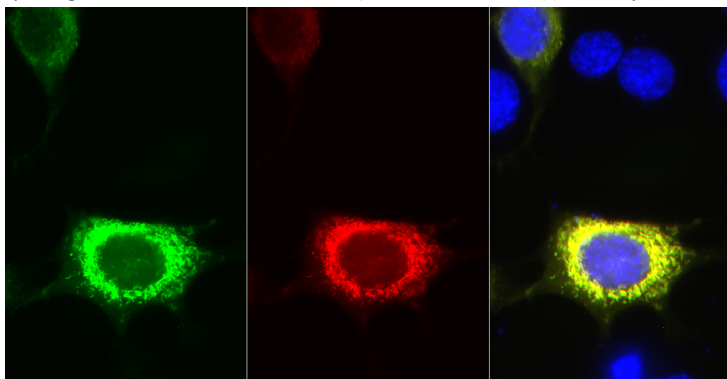
protag-HiRes anti-GFP camelid single-domain antibody (sdAb) produced by NanoTag Biotechnologies GmbH. It recognizes GFP and its most common derivatives with high affinity and specificity. It recognizes Sirius, tSapphire, Cerulean, eCFP, mTurquoise 1/2, GFP, acGFP, EGFP, Emerald GFP, mEGFP (A206K), mEGFP (L221K), superecliptic pHluorin, paGFP, superfolder GFP, eYFP, mVenus, Citrine.

In protag-HiRes anti-GFP-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.

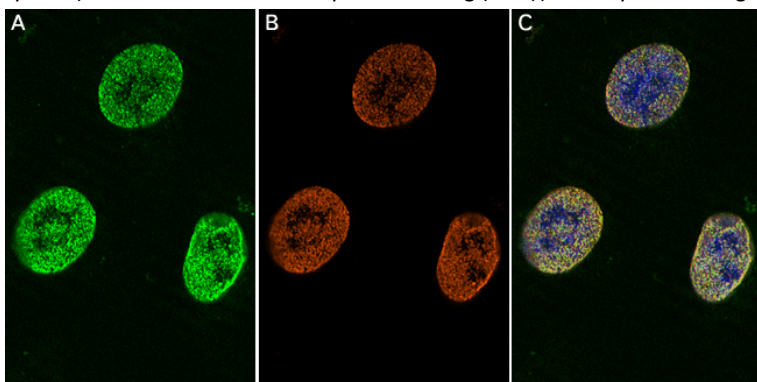
## Product images



Stable HeLa cell line expressing YFP-fusion protein (A). Cells were stained with protag-HiRes anti-GFP-X1 Atto 488 (B, Cat. No. 81105) and protag-HiRes anti-GFP-X4 Atto 488 (C, Cat. No. 81405L)(courtesy of NanoTag Biotechnologies GmbH).



Immunostaining of PFA fixed 3T3 cells expressing a TOM70-GFP reporter protein with protag-HiRes anti-GFP-X1Atto 647N (dilution 1:500, the GFP signal is represented in green, the corresponding protag-HiRes signal is represented in red and the merge of both channels is represented in yellow). Nuclei were visualized by DAPI staining (blue)(courtesy of NanoTag Biotechnologies GmbH).



Stable HeLa cell line expressing YFP-fusion protein (A, false color). Cells were stained with protag-HiRes anti-GFP-X1 Atto 542 (B, false color). Overlay of both channels and additional DAPI stain (C)(courtesy of NanoTag Biotechnologies GmbH)