Product datasheet

protag-HiRes anti-GFP-X4 Alexa 647

Short overview

Cat. No.	81412L
Quantity	200 µl

Product description

Host	Llama/alpaca
Antibody Type	Recombinant, produced in E.coli
Isotype	Single-domain antibody
Clone	1H1/1B2
Immunogen	GFP
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	Alexa 647
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	Cerulean, Citrine, EGFP, Emerald GFP, GFP, Sirius, Superecliptic pHluorin, Superfold GFP, acGFP, eCFP, eYFP, mEGFP (A206K), mEGFP (L221K), mTurquoise 1/2, mVenus, paGFP, tSapphire
No reactivity	Dendra2, Dronpa, tdEOS, mEOS3.2, mRuby3, mTFP, mCherry, mRFP, dsRed, mTagBFP or their most common derivatives

Applications

Immunocytochemistry (ICC)	1:500

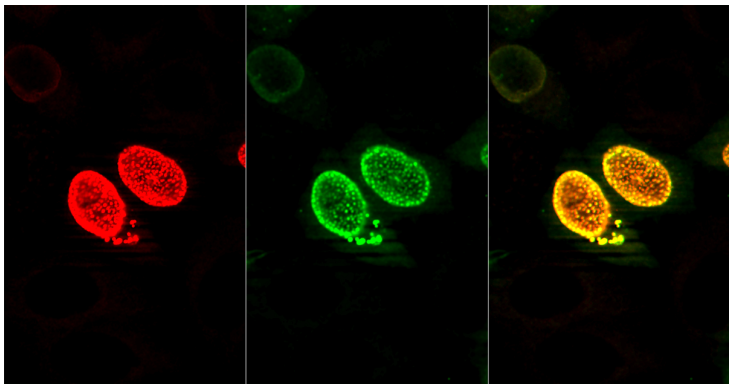
Background

protag-HiRes anti-GFP is a blend of two 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, acGFP, GFP, EGFP, Emerald GFP, mEGFP (A206K), mEGFP (L221K), superecliptic pHluorin, paGFP, superfolder GFP, eYFP, mVenus, Citrine.

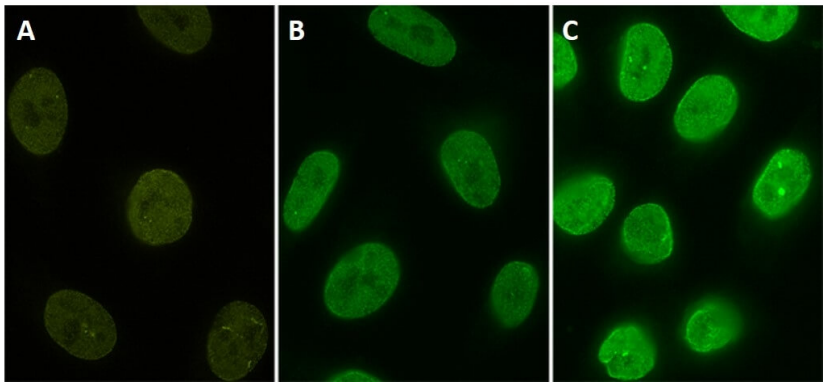
In protag-HiRes anti-GFP-X4, two fluorophore molecules are site-specifically coupled to each individual single-domain antibody. The blend of two camelid single-domain antibodies therefore simultaneously targets up to four fluorophores to the protein of interest, which ensures extra-bright signals. Owing 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-GFP-X4 can thus improve the localization accuracy by 10-15 nm. Both features - superior brightness and precise fluorophore placement - render our protag-HiRes anti-GFP-X4

products excellent tools for all microscopy techniques.

Product images



Indirect immunostaining of PFA fixed Hela cells expressing Nup98-GFP with protag-HiRes anti-GFP-X4 Atto 565 (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)(courtesy of NanoTag Biotechnologies GmbH).



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