Product datasheet

protag-HiRes anti-mScarlet-i-X2 Sulfo-Cyanin 3 (Cy3)

Short overview

Cat. No.	84209L
Quantity	200 µl

Product description

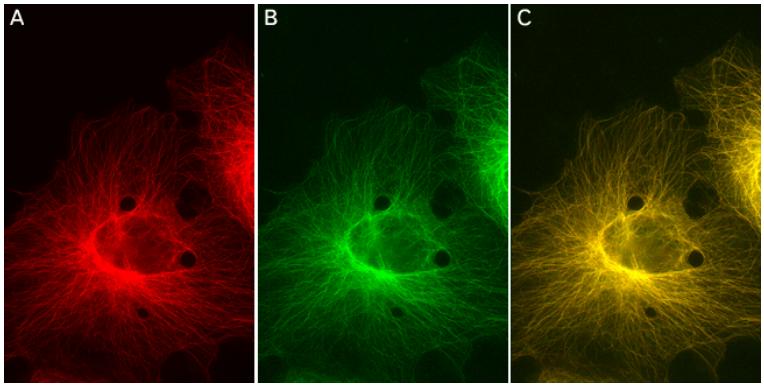
Host	Llama/alpaca
Antibody Type	Recombinant, produced in E.coli
Isotype	Single-domain antibody
Clone	2B12
Immunogen	RFP
Formulation	2.5 µM fluorescently labeled single-domain antibody in buffered saline, 50% glycerol, 0.09% sodium azide
Note	Centrifuge prior to opening
Conjugate	Sulfo-Cyanin 3 (Cy3)
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

Background

protag-HiRes anti-mScarlet-i camelid single-domain antibody (sdAb) produced by NanoTag Biotechnologies GmbH. It recognizes mScarlet-i in its native conformation with high affinity and specificity. It can also recognize some mRFP-derived red fluorescent protein like mOrange2, dsRed, tdTomato, mRFP and mCherry in its native conformation. It does not cross-react with GFP or mTagBFP derivatives.

In protag-HiRes anti-mScarlet-i-X2, two fluorophore molecules are site-specifically coupled to each individual single-domain antibody. protag-HiRes anti-mScarlet-i-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-mScarlet-i-X2 can thus improve the localization accuracy by 10-15 nm. Both features - enhanced brightness and precise fluorophore placement - render the protag-HiRes anti-mScarlet-i-X2 products superior tools for all microscopy techniques.

Product images



COS cells transfected with mScarlet-i-tubullin (A) and stained with protag-HiRes anti-mScarlet-i-X2 Atto 488 (B, Cat. No. 84205). Overlay in (C)(courtesy of NanoTag Biotechnologies GmbH).