Datasheet for ABIN6953237

Recombinant anti-RFP antibody (AZDye 568)

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Overview

Quantity:	200 µL
Target:	RFP
Reactivity:	Discosoma
Host:	Alpaca
Expression System:	E.coli
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This RFP antibody is conjugated to AZDye 568
Application:	Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Purpose:	Camelid sdAb anti-RFP conjugated with AZDye 568 (Alexa Fluor 568 equivalent), Clones 2B12/2A1
Clone:	2B12-2A1
Fragment:	single-domain Antibody (sdAb)
Specificity:	Recognizes most common red fluorescent proteins like mRFP and derivatives like mCherry, mScarlet-i, tdTomato, dsRed and mOrange.
Cross-Reactivity (Details):	Does not cross-react with GFP or mTagBFP derivatives.
Characteristics:	A dye conjugated alpaca single-domain antibody (sdAb), also referred to as VHH or nanobody. It is in the range of 15 kDa and 3 nm in molecular weight and size respectively. This means that

Product Details

	sdAbs are ten times lighter and up to 5x smaller than a conventional IgG molecule. They can position a fluorophore up to 20 nm closer to the intended target than using conventional primary-secondary antibody complex detection.
Purification:	Produced in: E.coli
Labeling Ratio:	A blend of 2 different sdAbs that bind at different epitopes of the same target protein, each sdAb bears 2 site-specifically coupled fluorophores.

Target Details

Target:	RFP
Alternative Name:	RFP (RFP Products)

Application Details

Application Notes:	Recommended dilution 1:500
Comment:	A blend of 2 different sdAbs that bind at different epitopes of the same target protein, two fluorophore molecules are site-specifically coupled to each individual sdAb molecule. The reagent therefore simultaneously targets up to four fluorophores to the protein of interest, which ensures extra-bright signals. Owing to the small size of sdAb, the distance between the target epitope and each fluorophore is below 4 nm. In comparison to conventional detection systems using conventional antibodies, this product can thus improve the localization accuracy by 10-15 nm. Both features - superior brightness and precise fluorophore placement - render this products excellent tools for all microscopy techniques.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitute with 50 % glycerol in deionized water. We recommend including 0.1 % sodium azide as a preservative if applicable.
Concentration:	5 µM
Buffer:	lyophilized from PBS pH7.4 with 2% BSA (US-Origin)
Handling Advice:	Protect from light!
Storage:	-20 °C,-80 °C

Handling

Storage Comment:	Up to 3 months store at -20 °C. Up to 12 months store at -80 °C or below
Expiry Date:	12 months