Datasheet for ABIN4368359

Recombinant anti-Blue Fluorescent Protein antibody (Atto 488)

1 Image

Go to Product page

Overview

Quantity:	200 µL
Target:	Blue Fluorescent Protein (BFP)
Reactivity:	Entacmaea quadricolor
Host:	Alpaca
Expression System:	E.coli
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This Blue Fluorescent Protein antibody is conjugated to Atto 488
Application:	Flow Cytometry (FACS), Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Purpose:	Camelid sdAb anti-TagFP conjugated with Atto488, Clone 1H7
Immunogen:	BFP
Clone:	1H7
Fragment:	single-domain Antibody (sdAb)
Specificity:	Recognizes mTagBFP, mKate, mKate2, mTagRFP, mTagRFP657 and most common fluorescent proteins deriving from Entacmaea quadricolor
Cross-Reactivity (Details):	Does not cross-react with common GFP- or dsRed 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:	Two site-specifically conjugated fluorophores per sdAb.

Target Details

Target:	Blue Fluorescent Protein (BFP)
Alternative Name:	TagBFP (BFP Products)
Molecular Weight:	26 kDa

Application Details

Application Notes:	Recommended dilution 1:500
Comment:	Two site-specifically coupled fluorophores per molecule. The reagent can therefore simultaneously target two fluorophores to your protein of interest, which results in enhanced image brightness. Owing to the small size of the sdAb, the distance between the target epitope and each fluorophore is below 4 nm. In comparison to conventional detection systems using conventional antibodies, this sdAb can thus improve the localization accuracy by 10-15 nm. Both features - enhanced brightness and precise fluorophore placement - renders this product superior tools for all microscopy techniques.
Restrictions:	For Research Use only

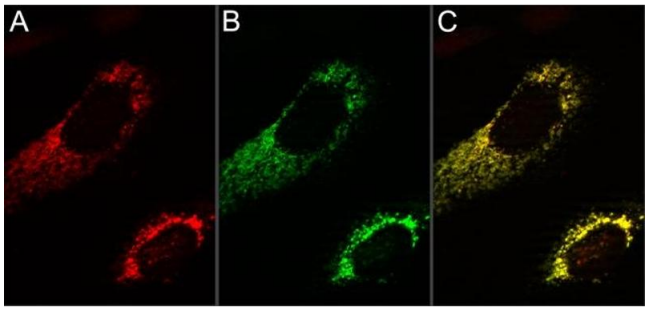
Handling

Format:	Lyophilized
Concentration:	5 µM
Buffer:	2.5 µM fluorescently labeled sdAb in buffered saline, 50 % glycerol, 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Protect from light!

Handling

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

Images



Immunofluorescence

Image 1. 3T3 cells transfected with the mitochondrial marker TOM70-mTagBFP (A, false color illustration in red), stained with anti-TagBFP Atto488 (B, green). An overlay of both channels in shown in C.