





## Recombinant anti-Blue Fluorescent Protein antibody (AZDye 568)



## Overview

O V CI VIC VV	
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 AZDye 568
Application:	Flow Cytometry (FACS), Immunocytochemistry (ICC), Immunofluorescence (IF)
Product Details	

Product Details	
Purpose:	Camelid sdAb anti-TagBFP conjugated with AZDye 568 (Alexa Fluor 568 equivalent), Clone 1H7
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 sdAbs are ten times lighter and up to 5x smaller than a conventional IgG molecule. They can

## **Product Details**

Product Details	
	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 single fluorophore is coupled to exactly one sdAb
Target Details	
Target:	Blue Fluorescent Protein (BFP)
Alternative Name:	TagBFP (BFP Products)
Application Details	
Application Notes:	Recommended dilution 1:500
Comment:	Each fluorophore is coupled to exactly one sdAb, 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.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	The sdAb clone was lyophilized from PBS pH 7.4 containing 2% BSA. Please reconstitute with 200 $\mu$ L of 50 % glycerol in deionized water. It is recommend including 0.1 % sodium azide as a preservative if applicable. When reconstituted in 200 $\mu$ l, the concentration of single-domain antibody is 5 $\mu$ M.
Concentration:	5 μΜ
Buffer:	5 μM fluorescently labeled sdAb in buffered saline, 50 % glycerol, 0.1 % 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:	Minimize the number of freeze-thaw cycles by aliquoting the reconstituted protein. Long term storage at -80 °C for up to 6 months. Working aliquots can be stored at -20 °C for up to 4 weeks. It is recommend storing the reconstituted protein at 4 °C.
Expiry Date:	12 months