

Anti-turboGFP, AlpSdAbs[®] VHH(Biotin)

Summary

Code	014-101-004
Immunogen	TurboGFP
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	Biotin
Specificity	TurboGFP
Cross-Reactivity	No cross-reactivity with CopGFP, jellyfish GFP and derivatives
Purity	Recombinant Expression and Affinity purified
Concentration	1mg/ml
Formation	Liquid, 10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300
Storage	Store at -20 °C(Avoid freeze / thaw cycles)

Description

Anti-turboGFP, AlpSdAbs[®] VHH(Biotin) is designed for detecting turboGFP fusion proteins. Anti-turboGFP, AlpSdAbs[®] VHH(Biotin) is based on monoclonal, recombinant, single domain antibody to turboGFP coupled to Biotin. Based on immunoelectrophoresis and/or ELISA, Anti-turboGFP, AlpSdAbs[®] VHH(Biotin) detects the turboGFP selectively, no reactivity with other proteins.

Background

The dimeric green fluorescent protein TurboGFP is derived from the green fluorescent protein CopGFP of the copepod *Pontellina plumata*. It possesses bright green fluorescence with excitation maximum at 482 nm and emission maximum at 502 nm. TurboGFP is a fast maturing protein: its fluorescent signal is visible earlier than other green fluorescent proteins. TurboGFP shares only about 20% sequence identity with jellyfish GFP variants. Therefore, most anti-GFP antibodies do not bind to TurboGFP. TurboGFP is mainly intended for applications where fast appearance of bright fluorescence is crucial. It is specially recommended for cell and organelle labeling and tracking the promoter activity. Destabilized TurboGFP variant allows accurate analysis of rapid and/or transient events in gene regulation.

VHH are single-domain antibodies derived from the variable regions of heavy chain of Camelidae immunoglobulin. The size of VHH is extremely small (<15KDa) compared to other forms of antibody fragment, which significantly increase the permeability of VHH. Thus VHH is considered of great value for research, diagnostics and therapeutics.

Benefits

High lot-to-lot consistency
 Increased sensitivity and higher affinity
 Animal-free production

Application notes

ELISA 1:5,000-1:20000
 IP 1-2ug/sample

BLI (biolayer interferometry)
 SPR (surface plasmon resonance)

Dilution factors are presented in the form of a range because the optimal dilution is a function of many factors, such as antigen density, permeability, etc. The actual dilution used must be determined empirically.

This product is for research use only and is not approved for use in humans or in clinical