

Anti-GFP, AlpHcAbs[®] Mouse antibody(HRP)

Summary

Code	019-301-005
Immunogen	GFP
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c fused to Mouse IgG2a Fc(mutation)
Conjugate	HRP
Specificity	GFP
Cross-Reactivity	Recognizes GFP, mEGFP, superfolder GFP and most common CFP and YFP variants. Does not cross-react with mCherry, mRFP, dsRed, mTagBFP, mTagRFP or their most common 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% proclin300,50% Glycerol
Storage	Store at -20 °C(Avoid freeze / thaw cycles), protect from light

Description

Anti-GFP, AlpHcAbs[®] Mouse antibody(HRP) is designed for detecting GFP fusion proteins specifically. Anti-GFP, AlpHcAbs[®] Mouse antibody(HRP) is based on monoclonal, recombinant, mouse IgG2a Fc fused fab of alpaca IgG1 antibody to GFP coupled to HRP. Based on immunoelectrophoresis and/or ELISA, Anti-GFP, AlpHcAbs[®] Mouse antibody(HRP) detects GFP fusion proteins selectively, no reactivity with other proteins.

Background

Green fluorescent proteins (GFPs) and the variants thereof are widely used to study protein function and location. GFP was originally derived from the jellyfish *Aequorea victoria*. It has 238 amino acid residues and a green fluorophore, which is comprised of only three amino acids: Ser65-Tyr66-Gly67. The stable protein structure is formed by beta sheets, which have a conformation that makes up an 11-stranded drum-like structure. The stability of GFP allows it to withstand pH levels ranging from mildly acidic (pH=5.5) to extremely basic (pH=12), and can also resist temperatures of up to 65°C. GFP has major and minor excitation peaks at wavelengths of 395 nm and 475 nm, respectively.

Using antibody with Fc(mutation), the background from Fc receptors will be eliminated.

Benefits

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

Suggested Working Concentration

ELISA	1:50000-1:200000
WB	1:50000-1:200000

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