Anti-Chicken IgY, AlpSdAbs® VHH(APC)

Code	024-101-011
Immunogen	Recombinant Fc region of chicken IgY
Host	Alpaca pacous
Isotype	VHH domain of alpaca IgG2b/2c
Conjugate	APC(Ex: 651nm, Em: 662nm)
Specificity	Fc region of chicken IgY
Cross-Reactivity	No cross-reactivity with mouse, rabbit, human, cynomolgus, rat, goat IgG
Purity	Recombinant Expression and Affinity purified
Concentration	0.1mg/mL
Formation	Liquid, 10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300
Storage	Store at 2-8 °C, Protect from light.

Description

Anti-Chicken IgY, AlpSdAbs® VHH(APC) is designed for detecting chicken IgY specifically. Anti-Chicken IgY, AlpSdAbs® VHH(APC) is based on monovalent, recombinant single domain antibodies to chicken IgY fused to APC. Based on immunoelectrophoresis and/or ELISA, Anti-Chicken IgY, AlpSdAbs® VHH(APC) detects the chicken IgY selectively, no reactivity with mouse, rabbit, human, cynomolgus, rat, goat IgG.

Background

Hens egg yolk immunoglobulins IgY can be transferred from the serum of mother hen to the offspring egg yolk to acquire immunity. In the immunodiagnostic technologies, IgY is an excellent antibody for using in immunological assays involving mammalian sera, due to discriminative properties of IgY compared to mammalian IgG, as IgY does not react with the rheumatoid factor and human anti-mouse IgG antibodies do not activate the complement system and do not bind to Fc receptor. Also, they have poor cross reactivity to mammalian IgG due to immunological differences. IgY does not contain a hinge region but does contain an additional constant domain. The whole IgY molecule possesses both the Fc region and the Fab region, which possessing the epitope-recognition site. The IgYcontains two heavy and light chains. The common IgY is monomeric with a molecular weight of approximately 170 kDa.

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

Flow Cyt	1:200-1:1000
ICC/IF	1:200-1:1000

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.