

### Datasheet for ABIN7565717

# **Rabbit anti-Llama VHH Antibody**



#### Overview

Quantity:	100 μg
Target:	VHH
Reactivity:	Llama
Host:	Rabbit
Clonality:	Polyclonal
Application:	ELISA, Western Blotting (WB)

#### **Product Details**

Purpose:	Rabbit Anti-VHH antibody can be used to detect single domain VHH antibodies.
Immunogen:	Immunogen: This antibody was prepared from whole rabbit serum produced by repeated immunizations with a VHH camelid domain protein.  Immunogen Type: Recombinant Protein
Isotype:	IgG
Cross-Reactivity (Details):	Anti-VHH is directed against the llama VHH protein fragment.
Characteristics:	CXCR4 antibody detects a G coupled -protein receptor. Human immunodeficiency virus (HIV) and related viruses require coreceptors, in addition to CD4, to infect target cells. Some G protein-coupled receptors including CCR5, CXCR4, CCR3, CCR2b and CCR8 in the chemokine receptor family, and four new human molecules GPR15, STRL33, GPR1 and V28 were recently identified as HIV coreceptors. Among them, CXCR4 (fusin, LESTR or HUMSTR) is a principal coreceptor for T-cell tropic strains of HIV-1 fusion and entry of human white blood cells. CXCR4 is also required for the infection by dual-tropic strains of HIV-1 and mediates CD-4 independent infection by HIV-2. The a-chemokine SDF-1 is the ligand for CXCR4 and prevents infection by T-

tropic HIV-1. CXCR4 associates with the surface CD4-gp120 complex before HIV enters target cells. CXCR4 messenger RNA levels correlated with HIV-1 permissiveness in diverse human cell types. Antibodies to CXCR4 block HIV-1 and HIV-2 fusion and infection of human target cells. The amino-terminal domain and the second extracellular loop of CXCR4 serve as HIV binding sites. Anti-CXCR4 antibodies are ideal for investigators involved in Cytokines and Growth Factors or Infectious Disease research.

Purification:

The product was purified from monospecific antiserum by protein A chromatography. Anti-VHH antibody detects recombinant VHH proteins, native Llama IgG2 and native Llama IgG3.

Sterility:

Sterile filtered

#### **Target Details**

Target: VHH

Background: The single-domain antibody (sdAb) is a small (12 - 14 kDa) antibody fragment that

The single-domain antibody (sdAb) is a small (12 - 14 kDa) antibody fragment that consists of a monomeric variable domain derived from the heavy chain, also called a VHH antibody. These heavy chain only Fab-like domains have activity that is similar to a whole antibody, and they are able to bind to a specific antigens. SdAb's are derived from camelid species that include llamas, alpacas and camels. Camelids produce both classical (containing heavy and light chain fragments) and non-classical antibody structures (containing only a heavy chain). VHH antibodies are the smallest functional antigen-binding fragment that occurs in nature and these are now being used in biotechnology as a novel antibody scaffold. The small size of the VHH single domain antibody makes it very attractive for use in diagnostic imaging and they have potential for therapeutic activity.

#### **Application Details**

Application Notes: Application Note: Anti-VHH antibody has been tested by ELISA and Western blot. Specific

conditions for reactivity should be optimized by the end user. Some cross-reactivity to E.coli proteins may be observed. Western Blot Dilution: 1:1,000-1:5,000 ELISA Dilution: 1:10,000-

1:50,000

Restrictions: For Research Use only

#### Handling

Format: Liquid

Concentration: 1.08 mg/mL

## Handling

Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
	Stabilizer: None
	, 0.01 % (w/v) 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.
Chavasa	4.00.00.00
Storage:	4 °C,-20 °C
Storage: Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended
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