

Datasheet for JOT0058-1

Anti-Vimentin VHH Antibody

BASIC INFORMATION

Name	Anti-Vimentin VHH Antibody
Specificity	Vimentin
Species Reactivity	Human
Description	Alpaca derived anti-Vimentin VHH single domain antibody (molecular weight: 13.9 kDa), expressed in <i>E. coli</i> under conditions free from animal derived components
Conjugate and tags	Un-conjugated; with a 6*His tag at its C-terminal
Tested Applications	ELISA
Purification	Affinity chromatography purified via Ni-charged resin
Format	Liquid
Product buffer solution	25 mM TAPS pH8.5, 500 mM NaCl, 5 mM EDTA, 0.1 % Proclin 300 Solution
Storage	4°C; Do not freeze.
Analyte description	Vimentin is a developmentally regulated intermediate filament protein (IFP) found in cells of mesenchymal origin. It is believed to be involved with the intracellular transport of proteins between the nucleus and plasma membrane. Unlike other IFP proteins, vimentin is expressed, along with desmin, during the early stages of cellular development. During the development process, vimentin is exchanged for new, tissue-specific IFPs. Vimentin has been implicated to be involved in the rate of steroid synthesis via its role as a storage network for steroidogenic cholesterol containing lipid droplets. Vimentin phosphorylation by a protein kinase causes the breakdown of intermediate filaments and activation of an ATP and myosin light chain dependent contractile event. This results in cytoskeletal changes that facilitate the interaction of the lipid droplets within mitochondria, and subsequent transport of cholesterol to the organelles leading to an increase in steroid synthesis.

QUALITY - TRACEABILITY - INTEGRITY

Life Science Group

The Science Centre, 1 Blaydon Road, Sandy, Bedfordshire, SG19 1RZ

Tel: +44 (0) 1234 889180 Email: sales@lifesciencegroup.co.uk Web: www.lifesciencegroup.co.uk

Life Science Production, Antibody Production Services and Diagnostic Kit Services are divisions of Life Science Group Ltd

Registered in England and Wales Company Number: 06606016

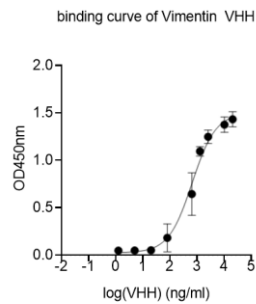


PARAMETERS TESTED ON EACH LOT

Product concentration	1 mg/mL by Nanodrop
Purity	≥95% (4-12% gradient SDS-PAGE)
Affinity constant	Not determined
Positive controls	Positive ELISA detected in: recombinant human vimentin protein
Recommended dilutions	ELISA 1:1000-1:568000
Material safety note	This product is sold for research use only . Standard Laboratory Practices should be followed when handling this material.

SELECTED VALIDATION DATA

ELISA



Indirect ELISA showing anti-Vimentin VHH antibody (JOT0058-1) binding to purified Vimentin. Plates were coated with 100ng/well purified protein and binding of JOT0058-1 was assessed in serial dilution from 1.25ng/ml primary antibody in triplicate.

QUALITY - TRACEABILITY - INTEGRITY

Life Science Group

The Science Centre, 1 Blaydon Road, Sandy, Bedfordshire, SG19 1RZ

Tel: +44 (0) 1234 889180 Email: sales@lifesciencegroup.co.uk Web: www.lifesciencegroup.co.uk

Life Science Production, Antibody Production Services and Diagnostic Kit Services are divisions of Life Science Group Ltd

Registered in England and Wales Company Number: 06606016

