

Rev03
Update: Aug,08,2025**DATASHEET**

MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit

Cat. No.: A02326

Overview

Specificity	This product is specific for Vedolizumab.
Host Species	Rabbit
Immunogen	Vedolizumab
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Application	Recommended Usage
Sandwich ELISA	0.5-2 µg/ml
ELISA	0.01-1 µg/ml

Properties

Form	Lyophilized
Storage Buffer	Lyophilized with PBS, pH 7.2, containing 0.02% sodium azide.
Reconstitution	Reconstitute the lyophilized antibody with deionized water (or equivalent) to a final concentration of 0.5 mg/mL.
Storage Instructions	The lyophilized product remains stable for up to 1 year at -20 °C from the date of receipt. Upon reconstitution, it can be stored for 2-3 weeks at 2-8 °C or for up to 12 months at -20 °C or below. Avoid repeated freezing and thawing cycles.
Purification	Protein A affinity column
Isotype	Rabbit IgG, κ

GenScript USA, Inc.

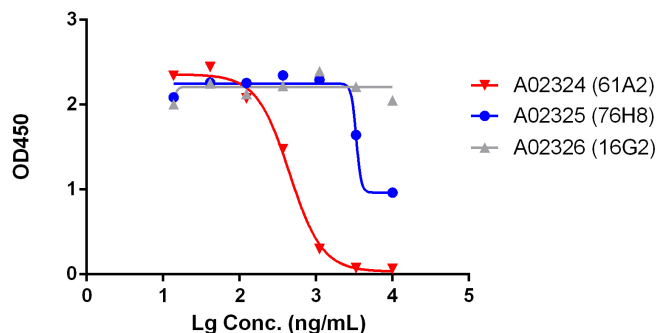
860 Centennial Ave. Piscataway, NJ 08854

Tel: 1-732-885-9188

Clonality	Monoclonal
Clone ID	16G2
Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

Examples

Anti-Vedolizumab Antibodies inhibit the binding of Vedolizumab to Human Integrin $\alpha 4 \beta 7$

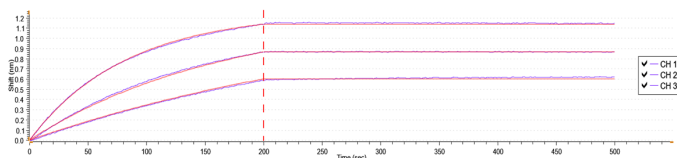


Anti-Vedolizumab Antibodies inhibit the binding of Vedolizumab to Human Integrin $\alpha 4 \beta 7$.

Vedolizumab was coated at a concentration of 1 $\mu\text{g}/\text{mL}$, followed by the addition of His-tagged Human Integrin $\alpha 4 \beta 7$ at 10 $\mu\text{g}/\text{mL}$ and anti-Vedolizumab antibody that was serially diluted starting from 10 $\mu\text{g}/\text{mL}$. Detection was performed using THE™ His Tag Antibody [HRP], mAb, Mouse (GenScript, A00612) diluted at 1:5000.

MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit (GenScript, A02326) exhibited non-inhibitory properties, MonoRab™ Anti-Vedolizumab Antibody (76H8), mAb, Rabbit (GenScript, A02325) showed weak inhibition, whereas MonoRab™ Anti-Vedolizumab Antibody (61A2), mAb, Rabbit (GenScript, A02324) demonstrated significant inhibitory properties with an IC_{50} value of 0.57 $\mu\text{g}/\text{mL}$.

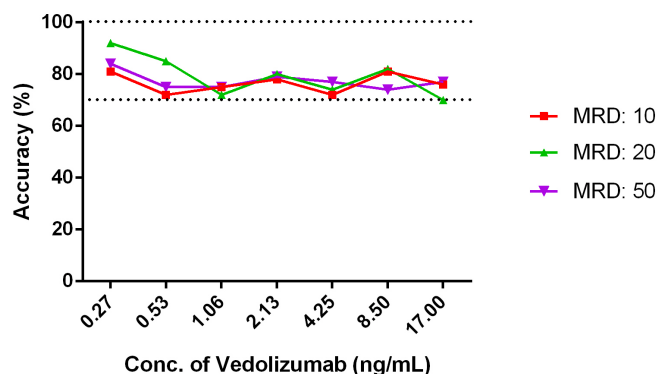
Binding affinity measurements of MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit to Vedolizumab



BLI (Biolayer interferometry) binding affinity measurements of MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit (GenScript, A02326) to Vedolizumab.

Vedolizumab captured on HFC (Anti-Human IgG Fc) Probes can bind MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit with a dissociation constant (KD) of less than 1 pM.

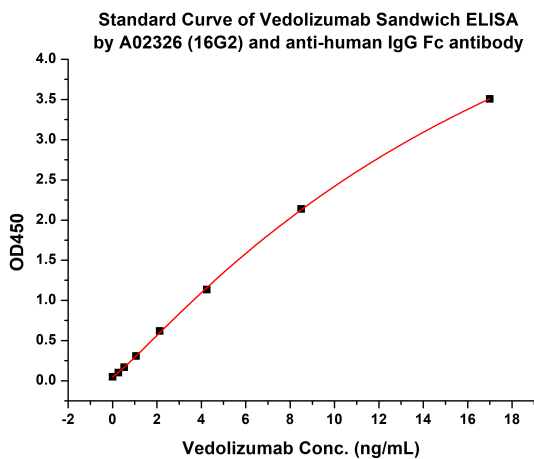
MRD Analysis of the Detection of Vedolizumab in Biological Matrix



MRD Analysis of the Detection of Vedolizumab in Biological Matrix.

The MRD is the minimum dilution necessary for the detection of Vedolizumab in biological matrix with least interference. Serum samples from cynomolgus monkey were serially diluted to determine the MRD of this assay, and the test result suggested that MRD was as 1:10.

In this ELISA assay, MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit (GenScript, A02326) was coated at a concentration of 1 $\mu\text{g}/\text{ml}$, and Mouse Anti-Human IgG Fc Antibody (50B4A9)[HRP], mAb (GenScript, A01854) was used as a detection antibody at a dilution of 1:10,000.



Standard Curve of Vedolizumab Sandwich ELISA by A02326 (16G2) and anti-human IgG Fc antibody.

In this Sandwich ELISA assay, MonoRab™ Anti-Vedolizumab Antibody (16G2), mAb, Rabbit (GenScript, A02326) was coated at a concentration of 1 µg/ml, and Mouse Anti-Human IgG Fc Antibody (50B4A9)[HRP], mAb (GenScript, A01854) was used as a detection antibody at a dilution of 1:10,000.

In this assay, a four-parameter logistic curve fitting program was used to create a standard curve with the R-Square equal to 0.99981. The typical dynamic range of the assay is 0.27 - 17 ng/mL.

Background

Target Background : Vedolizumab is a humanized monoclonal antibody used primarily for the treatment of inflammatory bowel diseases (IBD), such as Crohn's disease and ulcerative colitis. The drug functions by specifically targeting the integrin $\alpha 4\beta 7$, a molecule that facilitates the migration of white blood cells into the gastrointestinal (GI) tract. By blocking this interaction, Vedolizumab reduces inflammation within the GI tract, providing relief from the symptoms associated with IBD. The drug is administered intravenously and is known for its gut-selective mechanism of action, which limits systemic immune suppression and focuses treatment effects on the GI tract. It was approved by the FDA in 2014 and is marketed under the brand name Entyvio.

Synonyms : Vedolizumab; Entyvio; LDP-02; LDP02; MLN-0002; MLN-002; MLN002

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

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