# Anti-Human CD49D (Integrin alpha 4) (Natalizumab) - Dylight 488

# IVMB0434

## Product Information

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| **Product SKU**: | IVMB0434 | **Clone**: | Hu114 | **Target**: | CD49D |
| **Size**: | 100 µg | | | **Isotype**: | Human IgG4κ |

## Additional Information

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| **Reactivity:** | Human | **Host Species**: | Human |
| **Antibody Type**: | Biosimilar Recombinant Human Monoclonal Antibody | **Expression Host**: | HEK-293 Cells |

## Immunogen Information

**Background**: Natalizumab is characterized as a disease-modifying therapy for multiple sclerosis (a disease of the central nervous system (CNS)), and inflammatory bowel disease. It works by inhibiting the migration of leukocytes to inflammation sites. The VCAM-1 and α4β1-integrin interaction is necessary for leukocyte adhesion, firm attachment, and transmigration across the blood-brain barrier into the CNS. Natalizumab, a recombinant, humanized antibody, binds to α4β1 -integrin and blocks its interaction with VCAM-1. Hence, leukocyte migration into brain tissue is inhibited, thereby reducing inflammation and preventing the formation of multiple sclerosis lesions.[1] Inflammation in the gut pertaining to inflammatory bowel disease can be controlled in a similar fashion. Blocking α4β7-integrin with a humanized, monoclonal antibody, specific to the α4β7 heterodimer inhibits the migration of leukocytes into the inflamed intestinal tissue, thus, reducing inflammation in the gut.[2] This cost-effective, research-grade Anti-Human CD49D (Natalizumab) utilizes the same variable regions from the therapeutic antibody Natalizumab making it ideal for research projects.

**Product Concentration**: 0.2 mg/ml

**Applications**: FC

**Synonyms**: CD49D; alpha 4 subunit of VLA-4 receptor; ITGA4; Integrin alpha-IV

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| **Antigen Distribution**: | CD49D is a subunit of the integrin VLA-4, which is expressed on the cell surfaces of stem cells, progenitor cells, T and B cells, monocytes, natural killer cells, eosinophils, and neutrophils. |
| **Immunogen**: | RAMOS cell line injected into mice. |
| **Formulation**: | This DyLight 488 conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative. |
| **Specificity**: | This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Natalizumab. Natalizumab binds to the alpha 4 subunit of α4β1 and α4β7 integrins. This product is for research use only. |
| **Pathogen Testing**: | - |
| **Storage & Handling**: | This DyLight 488 conjugate is stable when stored at 2-8°C.Do not freeze. |