

IVMB0432

Product Information

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| Product SKU: IVMB0432 | Clone: Hu114 | Target: CD49D |
| Size: 50 µg | | Isotype: Human IgG4k |

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 $\alpha 4\beta 1$ -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 $\alpha 4\beta 1$ -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 $\alpha 4\beta 7$ -integrin with a humanized, monoclonal antibody, specific to the $\alpha 4\beta 7$ 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 R-phycoerythrin (R-PE) 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 $\alpha 4\beta 1$ and $\alpha 4\beta 7$ integrins. This product is for research use only. |
| Pathogen Testing: | - |
| Storage & Handling: | This R-phycoerythrin (R-PE) conjugate is stable when stored at 2-8°C. Do not freeze. |