

## 12-8043: Anti-Human CD49D (Integrin alpha 4) (Natalizumab) - APC

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	Hu114
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Alternative Name :</b>	CD49D; alpha 4 subunit of VLA-4 receptor; ITGA4; Integrin alpha-IV
<b>Isotype :</b>	Human IgG1k
<b>Immunogen Information :</b>	RAMOS cell line injected into mice.

### Description

Expression Host : HEK-293

This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Natalizumab. Natalizumab binds to the alpha 4 subunit of alpha4beta1 and alpha4beta7 integrins. This product is for research use only. 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 alpha4beta1-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 alpha4beta1 - 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.<sup>1</sup> Inflammation in the gut pertaining to inflammatory bowel disease can be controlled in a similar fashion. Blocking alpha4beta7-integrin with a humanized, monoclonal antibody, specific to the alpha4beta7 heterodimer inhibits the migration of leukocytes into the inflamed intestinal tissue, thus, reducing inflammation in the gut.<sup>2</sup> 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 Info

<b>Amount :</b>	50 µg Concentration : 0.2 mg/ml
<b>Content :</b>	This Allophycocyanin (APC) 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.
<b>Storage condition :</b>	This Allophycocyanin (APC) conjugate is stable when stored at 2-8°C. Do not freeze.

### Application Note

The suggested concentration for Natalizumab biosimilar antibody for staining cells in flow cytometry is  $\leq 1.0$  µg per 10<sup>6</sup> cells in a volume of 100 µl. Titration of the reagent is recommended for optimal performance for each application.