

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Integrin $\beta$ 4/CD104 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse Integrin $\beta$ 4 is observed and less than 1% cross-reactivity with recombinant                  |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Chinese hamster ovary cell line CHO-derived recombinant human Integrin $\beta$ 4/CD104<br>Asn28-Ser710<br>Accession # P16144                                                                                                                                                |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b>      | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

Integrin beta 4 (also known as GP150 and CD104) is a 150-200 kDa member of the Integrin beta family. It forms noncovalent heterodimers with Integrin  $\alpha$ 6 and participates in the formation of epithelial hemidesmosomes. Human Integrin  $\beta$ 4 is a type I transmembrane glycoprotein that is 1795 amino acids (aa) in length. It contains a 683 aa extracellular domain (ECD) (aa 28-710) and a large 1089 aa cytoplasmic region. Two ECD alternate splice forms may exist. One shows an 84 aa substitution for the 84 aa between aa 621-704. A second shows a 144 aa substitution for the first 704 amino acids. Human Integrin  $\beta$ 4 ECD shares 88% sequence identity with mouse Integrin  $\beta$ 4 ECD.

#### PRODUCT SPECIFIC NOTICES

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