

## Product Data Sheet

### anti-human Interleukin 13 receptor (IL13-R)

### monoclonal antibody

#### Product information

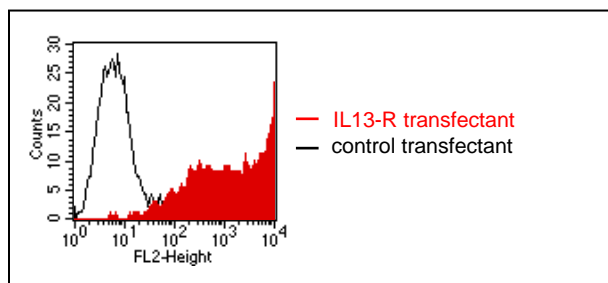
<b>Catalog Number:</b>	GM-0101
<b>Clone:</b>	GM-1C8
<b>Description:</b>	purified monoclonal mouse antibody
<b>Specificity:</b>	anti-human IL13-R
<b>Isotype:</b>	IgG1
<b>Purification:</b>	Protein G
<b>Storage:</b>	short term: 2°C - 8°C; long term: -20°C (avoid repeated freezing and thawing)
<b>Buffer :</b>	phosphate buffered saline, pH 7.2
<b>Immunogen:</b>	genetic immunisation with cDNA encoding human IL13-R $\alpha$ 1 (extracellular domain)
<b>Selection:</b>	based on recognition of the complete <b>native protein</b> expressed on transfected mammalian cells

#### Working dilutions

<b>Flow cytometry:</b>	1.2 $\mu$ g/ $10^6$ cells
<b>CELISA:</b>	1:200 - 1:400

For each application a titration should be performed to determine the optimal concentration.

#### Specificity testing by flow cytometry



**Fig.1:** FACS analysis of BOSC23 cells using GM-1C8 Cat.# GM-0101. BOSC23 cells were transiently transfected with an expression vector encoding either IL13-R (red curve) or an irrelevant protein (control transfectant: black curve). Binding of GM-1C8 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with IL13-R transfected cells.

*For research use only. Not for diagnostic or therapeutic use.*

## Background

*Interleukin 13 (IL-13)* is a T cell derived cytokine involved in the regulation of inflammatory and immune responses. IL-13R $\alpha$ 1 together with IL-4R $\alpha$  forms a functional receptor for both IL-4 and IL-13, which is why these two cytokines share many of their biological activities. The receptor is found on human B cells, monocytes and endothelial cells. However, no functional receptor is expressed on T cells, which explains why IL-13, in contrast to IL-4, fails to induce T<sub>H</sub>2-cell differentiation.

## References

1. **Myrtek et al. (2004):** Expression of interleukin-13 receptor alpha 1-subunit on peripheral blood eosinophils is regulated by cytokines. *Immunology* **112(4)**: 597-604.
2. **Krause et al. (2006):** Blockade of interleukin-13-mediated cell activation by a novel inhibitory antibody to human IL-13 receptor  $\alpha$ 1. *Mol Immunol* **33**: 1799-1807