

## Product Data Sheet

### anti-human FAS ligand (FasL) monoclonal antibody

#### Product information

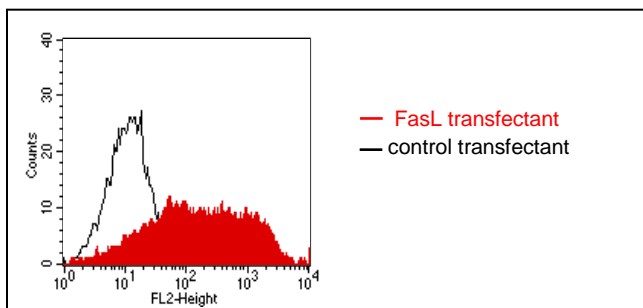
<b>Catalog Number:</b>	GM-0401
<b>Clone:</b>	GM-5F4
<b>Description:</b>	purified monoclonal mouse antibody
<b>Specificity:</b>	anti-human Fas ligand (FasL)
<b>Isotype:</b>	IgG1
<b>Purification:</b>	Protein G
<b>Storage:</b>	short term: 2°C - 8°C; long term: -20°C (avoid repeated freezing and thawing)
<b>Buffer :</b>	phosphate buffered saline, pH 7.2
<b>Immunogen:</b>	genetic immunisation with cDNA encoding human FasL (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 µg/10 <sup>6</sup> cells
<b>ELISA:</b>	1:200 - 1:400

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

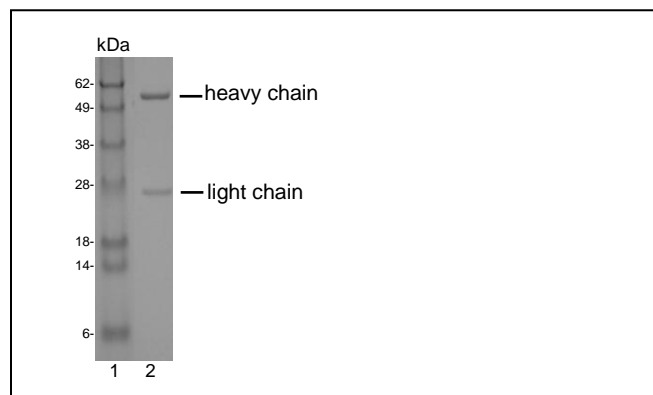
#### Specificity testing by flow cytometry



**Fig.1:** FACS analysis of BOSC23 cells using GM-5F4 Cat.# GM-0401. BOSC23 cells were transiently transfected with an expression vector encoding either FasL (red curve) or an irrelevant protein (control transfectant: black curve). Binding of GM-5F4 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with FasL transfected cells.

## SDS-PAGE analysis of GM-5F4

The antibody was purified by protein G affinity chromatography from cell culture supernatants and verified by SDS-Page (Fig.2).



**Fig.2:** SDS-PAGE analysis of purified GM-5F4 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 µg of purified GM-5F4 antibody. Proteins were separated by SDS-PAGE and stained with RAPID Stain™ Reagent.

## Background

The *FAS ligand (FASL, CD95)*, a member of the tumor necrosis factor family, induces apoptosis in FAS-bearing cells (1). FASL is a type II membrane receptor with a soluble form that can be released into the extracellular fluid by proteolytic processing. Various cells express Fas, whereas FASL is expressed in activated splenocytes and thymocytes (2). In the immune system, Fas and FasL are involved in down-regulation of immune reactions as well as in T cell-mediated cytotoxicity. Malfunction of the Fas system causes lymphoproliferative disorders and accelerates autoimmune diseases, whereas its exacerbation may cause tissue destruction.

## References

1. **Nagata S (1996).** Apoptosis mediated by the Fas system. *Prog Mol Subcell Biol* 16:87-103
2. **Suda T, Hashimoto H, Tanaka M, Ochi T, Nagata S (1997).** Membrane Fas ligand kills human peripheral blood T lymphocytes, and soluble Fas ligand blocks the killing. *J Exp Med* 186(12):2045-50
3. **Nagata S and Golstein P (1995).** The Fas death factor. *Science* 10;267(5203):1449-56