

Product Data Sheet

anti-human formyl peptide-receptor-like-1 (FPRL1) monoclonal antibody GM-1D6

Product information

Catalog Number:	GM-0601
Clone:	GM-1D6
Description:	purified monoclonal mouse antibody
Specificity:	anti-human formyl peptide-receptor-like-1 (FPRL1)
Isotype:	IgG1
Purification:	Protein G
Storage:	short term: 2°C - 8°C; long term: -20°C (avoid repeated freezing and thawing)
Concentration:	1 mg/ml
Buffer :	phosphate buffered saline, pH 7.2
Immunogen:	genetic immunisation with cDNA encoding human FPRL1
Selection:	based on recognition of the complete native protein expressed on transfected mammalian cells

Working dilutions

Flow cytometry:	1.2 µg/10 ⁶ cells
Immunofluorescence:	1 µg/10 ⁶ cells
CELISA:	1:200 - 1:400

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

Specificity testing by flow cytometry and by Spectral Confocal Microscopy

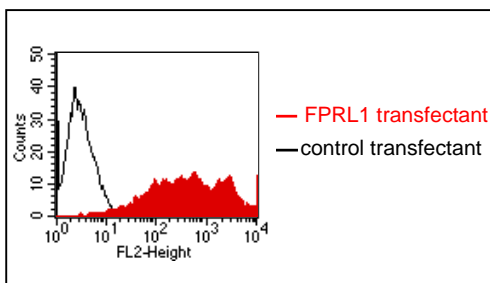


Fig.1: FACS analysis of BOSC23 cells using GM-1D6 Cat.# GM0601. BOSC23 cells were transiently transfected with an expression vector encoding either FPRL1 (red curve) or an irrelevant protein (control transfectant: black curve). Binding of GM-1D6 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with FPRL1 transfected cells.

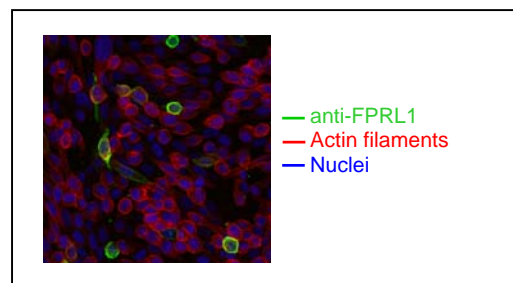


Fig.2: Spectral Confocal Microscopy of CHO cells using GM1-D6 Cat.# GM-0601. CHO cells were transiently transfected with an expression vector encoding FPRL1. Binding of GM-1D6 was visualized with a FITC-conjugated secondary antibody (green). Actin filaments are labeled with Alexa Fluor-555 Phalloidin (red). Cell nuclei are stained with DAPI (blue).

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SDS-PAGE analysis of GM-1D6

The antibody was purified by protein G affinity chromatography from cell culture supernatants and verified by SDS-Page (Fig.3).

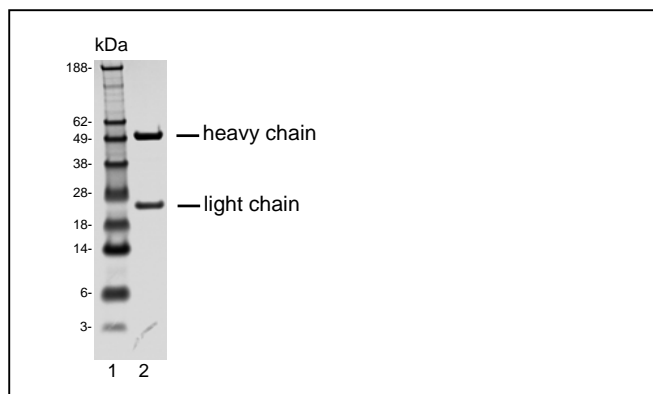


Fig.3: SDS-PAGE analysis of purified GM-1D6 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 µg of purified GM-1D6 antibody. Proteins were separated by SDS-PAGE and stained with RAPID Stain™ Reagent.

Background

Human formyl peptide-receptor-like-1 (FPRL1) belongs to the large family of G-protein coupled receptors (GPCR). It is a seven transmembrane protein expressed on mononuclear phagocytes and microglial cells. FPRL1 is a member of the chemoattractant subfamily of G protein-coupled receptors and plays a key role in inflammation via chemotaxis and the regulation of mediator release from leukocytes. It interacts with formyl peptides to attract phagocytes to sites of infection and promote inflammatory reactions (1). FPRL1 also interacts with amyloid beta peptides and has been implicated in phagocyte attraction to sites of amyloid plaques in Alzheimer's disease (2). Since FPRL1 is expressed in neutrophils and monocytes, and it was shown using another monoclonal antibody that chemokines can be potent and specific ligands, FPRL1 might have interesting functions in inflammatory pathways (3).

References

1. **Migeotte I, Communi D, Parmentier M (2006).** Formyl peptide receptors: a promiscuous subfamily of G protein-coupled receptors controlling immune responses. *Cytokine Growth Factor Rev* 17(6):501-19.
2. **Cui Y, Le Y, Yazawa H, Gong W, Wang JM (2002).** Potential role of the formyl peptide receptor-like 1 (FPRL1) in inflammatory aspects of Alzheimer's disease. *J Leukoc Biol* 72(4):628-35
3. **Elagoz A, Henderson D, Babu PS, Salter S, Grahames C, Bowers L, Roy MO, Laplante P, Grazzini E, Ahmad S and PM Lembo (2004).** A truncated form of CKbeta8-1 is a potent agonist for human formyl peptide-receptor-like 1 receptor. *Br J Pharmacol* 141: 37-46.

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