

Summary

## ARG23181 anti-CD16.2 / FcgRIV antibody [AT137]

Package: 100 μg Store at: -20°C

| Product Description | Rat Monoclonal antibody [AT137] recognizes CD16.2 / FcgRIV<br>Mouse anti human CD16-2 antibody, clone AT137, recognizes CD16-2, also known as FcRIV. CD16-2 is a<br>low affinity activatory receptor that binds to IgG2a and IgG2b with intermediate affinity. FcRIV has no<br>affinity for IgG1 or IgG3 and therefore has a unique subclass specificity when compared to other Fc<br>receptors. Expression of CD16-2 is restricted to cells of the myeloid lineage. |
|---------------------|--|
| Tested Reactivity   | Ms   |
| Tested Application  | FACS, IHC-Fr   |
| Host                | Rat  |
| Clonality           | Monoclonal   |
| Clone               | AT137  |
| lsotype             | lgG2a  |
| Target Name         | CD16.2 / FcgRIV  |
| Species             | Mouse  |
| Immunogen           | Fusion Protein consisting of mouse CD16-2 and rat CD4.   |
| Conjugation         | Un-conjugated  |
| Alternate Names     | Fcrl3; CD16-2; FcgRIV; Fcgr3a; FcgammaRIV; 4833442P21Rik   |

## **Application Instructions**

| Application table | Application   | Dilution       |
|-------------------|---|----------------|
|                   | FACS  | 1:10           |
|                   | IHC-Fr  | 1:100 - 1:1000 |
| Application Note  | FACS: Use 10 $\mu$ l of the suggested working dilution to label 10^6 cells in 100 $\mu$ l.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations<br>should be determined by the scientist. |                |

## Properties

| Form                | Liquid   |
|---------------------|--|
| Purification        | Purification with Protein G.   |
| Buffer              | TRIS buffered saline and 0.09% Sodium azide.   |
| Preservative        | 0.09% Sodium azide   |
| Concentration       | 1 mg/ml  |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot<br>and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated<br>freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed |

before use.

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

| Gene Symbol    | Fcgr4  |
|----------------|--|
| Gene Full Name | Fc receptor, IgG, low affinity IV  |
| Function       | Receptor for the Fc region of immunoglobulin gamma (PubMed:16039578). Also acts as a receptor for the Fc region of immunoglobulin epsilon (PubMed:17558411, PubMed:18949059). Binds with intermediate affinity to both IgG2a and IgG2b (PubMed:16039578, PubMed:17558411, PubMed:19795417). Can bind to IgG2a and IgG2b monomers (PubMed:18949059). Does not display binding to IgG1 or IgG3 (PubMed:16039578). Mediates neutrophil activation by IgG complexes redundantly with Fcgr3 (PubMed:18097064). Plays a role in promoting bone resorption by enhancing osteoclast differentiation following binding to IgG2a (PubMed:18949059). Has also been shown to bind to IgE allotype a only but not to allotype b (PubMed:17558411). Binds aggregated IgE but not the monomeric form and bound monomeric IgG is readily displaced by IgE complexes (PubMed:18949059). Binding to IgE promotes macrophage-mediated phagocytosis, antigen presentation to T cells, production of proinflammatory cytokines and the late phase of cutaneous allergic reactions (PubMed:17558411, PubMed:18949059). [UniProt] |
| Calculated Mw  | 28 kDa   |