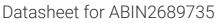
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## anti-IL12RB2 antibody

10 Publications



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#### Overview

| Quantity:    | 0.1 mg                                 |
|--------------|--|
| Target:      | IL12RB2                                |
| Reactivity:  | Mouse                                  |
| Host:        | Armenian Hamster                       |
| Clonality:   | Monoclonal                             |
| Conjugate:   | This IL12RB2 antibody is un-conjugated |
| Application: | Flow Cytometry (FACS)                  |

#### **Product Details**

| Brand:           | BD Pharmingen™   |
|------------------|--|
| Immunogen:       | Mouse IL-12Rbeta2 transfectants  |
| Clone:           | HAM10B9  |
| Isotype:         | IgG1 kappa   |
| Characteristics: | The HAM10B9 antibody reacts with the $\beta$ 2subunit (IL-12R $\beta$ 2), of the mouse IL-12 receptor complex. The IL-12R $\beta$ 2 subunit associates with a $\beta$ 1 subunit to form a heterodimeric IL-12 receptor complex. Each one of the IL-12R subunits exhibits low affinity for IL-12, but in combination, they bind IL-12 with high affinity. The IL-12R $\beta$ 1 subunit interacts primarily with IL-12 p40 whereas the IL-12R $\beta$ 2 binds both to IL-12 p40 and IL-12 p35. IL-12R $\beta$ 1 is required for high affinity binding of IL-12 but IL-12R $\beta$ 2 is required for signaling. The cytoplasmic regions of the $\beta$ 1 and $\beta$ 2 subunits contain the box 1 and box 2 motifs found in other cytokine receptors such as gp130, LIFR and G-CSFR. Naive T cells do not express IL-12R but both IL-12R subunits |

can be induced on T cells by antigenic stimulation. The IL12R is also expressed on activated NK cells. Th1 cells express both IL-12R subunits while Th2 cells lose the β2 subunit during differentiation. The HAM10B9 antibody was generated by immunizing hamsters with mouse IL-12RB2 transfectants. Expression of cell surface IL-12R 2 by T helper cells. Mouse Th1 cell line, 2D6 (left panel) and Th2 cell line, D10 (center panel) were stained with purified anti-mouse IL-12 receptor β2antibody (clone HAM10B9, 0.5 μg/test) followed by PE-conjugated anti-hamster IgG (0.25 µg, Cat . No. 554056). Staining with the HAM10B9 antibody (filled histograms) is compared to staining obtained using the isotype control antibody (open histograms). The histograms in the figure were derived from gated events with the forward and side light scatter characteristics of viable lymphocytes. Mouse splenocytes from C57BL/6 mice (right panel) were treated with an ammonium chloride lysing buffer to remove the red blood cells. Cells were subsequently cultured with ConA (2 µg/mL), PMA (50 ng/mL), Dextran sulfate (10 µg/mL), LPS (5 μg/mL), recombinant mouse IL-2 (10 ng/mL), recombinant mouse IL-12p70 (20 ng/mL) and anti-IL-4 antibody, clone 11B11 (5 µg/mL) for 5 days. Following culture the cells were harvested, washed, blocked with mouse Fc Block™ (Cat. No. 553141) and stained with purified anti-mouse IL-12 receptor β2 antibody (clone HAM10B9, 0.5 µg/test) followed by PE-conjugated antihamster IgG (0.25 µg, Cat . No. 554056) and Viaprobe (Cat. No. 555816). Staining with antimouse IL-12 receptor & 2antibody (clone HAM10B9, filled histograms) is compared to staining obtained using the isotype control antibody (Cat. No. 553969, open histograms). The histograms in the figure were derived from viable gated events (e.g. ViaProbe negative lymphocytes).

BD Pharmingen™ Purified Hamster Anti-Mouse IL-12 Receptor β2 - Purified - Clone HAM10B9 - Isotype Armenian Hamster IgG1, κ - Reactivity Ms - 0.1 mg

Purification:

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

#### **Target Details**

| Target:           | IL12RB2                                 |
|-------------------|---|
| Alternative Name: | IL-12 Receptor Beta2 (IL12RB2 Products) |
| Pathways:         | JAK-STAT Signaling                      |

#### **Application Details**

Application Notes:

Optimal working dilution should be determined by the investigator.

### **Application Details**

| Restrictions:      | For Research Use only  |
|--------------------|--|
| Handling           |  |
| Concentration:     | 0.5 mg/mL  |
| Buffer:            | Aqueous buffered solution containing ≤0.09 % sodium azide.   |
| Preservative:      | Sodium azide   |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.   |
| Storage:           | 4 °C   |
| Storage Comment:   | Store undiluted at 4°C.  |
| Publications       |  |
| Product cited in:  | Schrantz, Blanchard, Auffredou, Sharma, Leca, Vazquez: "Role of caspases and possible involvement of retinoblastoma protein during TGFbeta-mediated apoptosis of human B lymphocytes." in: <b>Oncogene</b> , Vol. 18, Issue 23, pp. 3511-9, (1999) (PubMed). |
|                    | Thornberry, Lazebnik: "Caspases: enemies within." in: <b>Science (New York, N.Y.)</b> , Vol. 281, Issue  |

There are more publications referencing this product on: Product page

5381, pp. 1312-6, (1998) (PubMed).