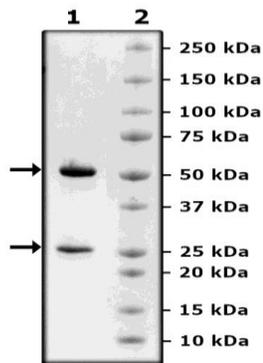


Product Information

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| Description: | This anti-IL23 α (interleukin 23 subunit alpha) is a purified recombinant monoclonal antibody that selectively binds to the p19 subunit of heterodimeric IL-23, which is composed of p19 and IL-12 p40. This antibody has been tested for specific binding affinity to IL23 α /IL12 β antigen. |
| Background: | IL23 (interleukin 23) is a cytokine of the IL12 cytokine family. It is a heterodimeric cytokine with an IL-12p40 subunit and a p19 one. It is produced by macrophages and dendritic cells, and acts as a pro-inflammatory cytokine. It acts on memory T cells, leading to IFN γ (interferon gamma) and IL17 production, and Th17 (T helper type 17) cell proliferation. IL23 is involved in auto-immune and inflammatory disorders, such as psoriasis and arthritis. The use of IL23 targeting antibodies has been ongoing. Ustekinumab, commercialized under the name Stelara™, is one example of the benefits of disrupting the interaction between IL23 and its receptor can be beneficial in the treatment of autoimmune disorders. |
| Species: | Human |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Concentration: | 1.48 mg/ml |
| Expression System: | HEK293 |
| Purity: | $\geq 90\%$ |
| Format: | Aqueous buffer solution. |
| Formulated In: | 8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol |
| MW: | Heavy Chain: 49 kDa; Light Chain: 24 kDa |
| Stability: | At least 6 months at -80°C. |
| Storage: | -80°C |
| Instructions for Use: | Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles. |
| Assay Conditions: | Functional validation: The antibody was validated by measuring anti-IL23 α binding to a IL23 α /IL12 β antigen (Acro Biosystems #ILB-H52W5) by ELISA. The IL23 α /IL12 β protein was coated onto a 96-well plate overnight at 4°C (50 μ l/well at a concentration of 6 μ g/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (BPS Bioscience #79311) and blocked using 100 μ l of Blocking Buffer 2 (BPS Bioscience #79728) for 1 hour at Room Temperature (RT). After removing the blocking buffer, 50 μ l/well of purified anti-IL23 α antibody (BPS Bioscience #101453), serially diluted in Blocking Buffer 2, was added for 60 minutes at RT. After 3 more washes, the plate was incubated with Goat Anti-Human IgG Fc (HRP) (Abcam #ab97225), washed, and incubated with Colorimetric HRP substrate. The reaction was stopped, and absorbance was read at 450 nm. The Blank value was subtracted from all values. |
| Applications: | Useful for studying the binding of IL23 α in ELISA and cellular assays. |

Quality Control Data

4-20% SDS-PAGE Coomassie Staining

IL23 α /IL12 β :Anti IL23 α Binding Assay