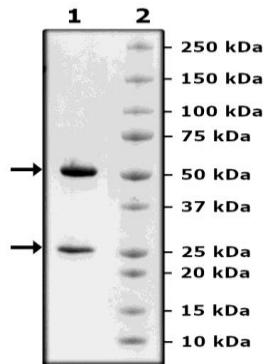


## Product Information

<b>Description:</b>	This anti-IL23 $\alpha$ (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 $\alpha$ /IL12 $\beta$ antigen.
<b>Background:</b>	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 $\gamma$ (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.
<b>Species:</b>	Human
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Concentration:</b>	1.48 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	$\geq 90\%$
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	Heavy Chain: 49 kDa; Light Chain: 24 kDa
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	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.
<b>Assay Conditions:</b>	Functional validation: The antibody was validated by measuring anti-IL23 $\alpha$ binding to a IL23 $\alpha$ /IL12 $\beta$ antigen (Acro Biosystems #ILB-H52W5) by ELISA. The IL23 $\alpha$ /IL12 $\beta$ protein was coated onto a 96-well plate overnight at 4°C (50 $\mu$ l/well at a concentration of 6 $\mu$ g/ml in PBS). The plate was washed 3 times with Immuno Buffer 1 (BPS Bioscience #79311) and blocked using 100 $\mu$ l of Blocking Buffer 2 (BPS Bioscience #79728) for 1 hour at Room Temperature (RT). After removing the blocking buffer, 50 $\mu$ l/well of purified anti-IL23 $\alpha$ 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.
<b>Applications:</b>	Useful for studying the binding of IL23 $\alpha$ in ELISA and cellular assays.

## Quality Control Data

## 4-20% SDS-PAGE Coomassie Staining

IL23 $\alpha$ /IL12 $\beta$ :Anti IL23 $\alpha$  Binding Assay