



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## Anti-IL-12p40 [Antibody 80] Bulk Size Ab03655-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This is a reformatted human IgG1 Fc Silent Fc Silent™ antibody, based on the original human IgG1 format, created for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent™, Kappa

**Clone Number:** Antibody 80

**Alternative Name(s) of Target:** IL-12; IL-12B; IL-23; NKSF2; CLMF p40; Interleukin-12; Interleukin-23; Interleukin-12 subunit beta; IL-12 subunit p40; Interleukin-12 subunit p40; Cytotoxic lymphocyte maturation factor 40 kDa subunit; NK cell stimulatory factor chain 2; PMA204, Antibody 1; Antibody 50

**UniProt Accession Number of Target Protein:** P29460

**Published Application(s):** functional assay, inhibit, neutralize, therapeutic, ELISA

**Published Species Reactivity:** Human

**Immunogen:** The original mouse antibody PMA204 was generated by immunizing mice with recombinant human IL-12 as an immunogen. This antibody is the humanized version of the murine antibody PMA204 generated by grafting CDRs of the mouse antibody onto human framework regions. The antibody was further engineered by introducing backmutations and 3 point mutations in the heavy chain and using a combination approach to get the optimized variant.

**Specificity:** This antibody specifically binds an epitope between amino acid residues 253 and 286 of the common subunit p40 of the human IL-12 and IL-23. IL-12Rβ1 binding to IL-12 and IL-23 is mediated via the common p40 subunit. IL-12 is a cytokine secreted by activated inflammatory cells (monocytes, macrophages, neutrophils, microglia, dendritic cells). IL-12 can act as a growth factor for activated T and NK cells, enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC. It associated with IL23A to form the IL-23 interleukin, which is a heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 is secreted by activated human macrophages as well as dendritic cells. IL-23 predominantly acts on memory T-cells and has been postulated to promote autoimmune disease through the regulation of IL-17A and IL-17F.

**Application Notes:** This antibody neutralized the binding of IL-12 to IL-12Rβ2 and IL-23 to IL-23R but did not inhibit the binding of IL-12 or IL-23 or IL-12p40 or IL-12p80 to IL-12Rβ1. The human IgG version of this antibody binds IL-12 and IL-23 with a binding affinity of  $K_d = 292$  pM and  $K_d = 280$  pM respectively. This antibody was reported to inhibit IL-12 induced IFN-gamma release by NK-92 cells and human PBMCs. This

antibody can also inhibit IL-23 induced IL-17 secretion by murine splenocytes. The therapeutic efficacy of this antibody was studied in the skin inflammation mouse model. This antibody was reported to significantly decrease epidermal thickness and reduced erythema and induration caused by IL-23. This antibody is capable of detecting recombinant IL-23 and native IL-23 produced by SAC stimulated PBMCs in an ELISA. This antibody showed reduced binding to IL-23 mutants D265A and R266A in an ELISA (US8563697).

**Antibody First Published in:** [PMID:](#)

**Note on publication:**

## Product Form

**Size:** 1 mg Purified antibody in bulk size.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note - This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.