

Interleukin-35

Tomorrow's Reagents Manufactured Today[®]

International Edition

Introduction

Interleukin-35 (IL-35) represents a new member of the IL-12 cytokine family, which includes IL-12, IL-23 and IL-27. IL-35 is a heterodimeric cytokine composed of EB13 (Epstein-Barr virus-induced gene 3 protein; EBV-induced gene 3 protein; IL-27B; IL-27 subunit β) and IL-12A (IL-12 subunit p35; CLMF p35) [1-2]. Members of the IL-12 family such as IL-12, IL-23, IL-27 and IL-35 are cytokines that play a critical role in influencing T helper cell differentiation and inflammatory processes. IL-35 is highly expressed in regulatory T cells (Treg) but not in effector or naive T cells. IL-35 induces proliferation

of Treg cell populations but reduces activity of Th17 cell populations [2]. A recent study identifies IL-35 as a new inhibitory cytokine required for the suppressive function of Treg cells *in vitro* and *in vivo* [3].

LT: [1] Epstein-Barr virus-induced gene 3 and the p35 subunit of interleukin 12 form a novel heterodimeric hematopoietin: O. Devergne, et al; PNAS 94, 12041 (1997) • [2] IL-35 is a novel cytokine with therapeutic effects against collagen-induced arthritis through the expansion of regulatory T cells and suppression of Th17 cells: W. Niedbala, et al; Eur. J. Immunol. 37, 3021 (2007) • [3] The inhibitory cytokine IL-35 contributes to regulatory T-cell function: L.W. Collison, et al; Nature 450, 566 (2007)

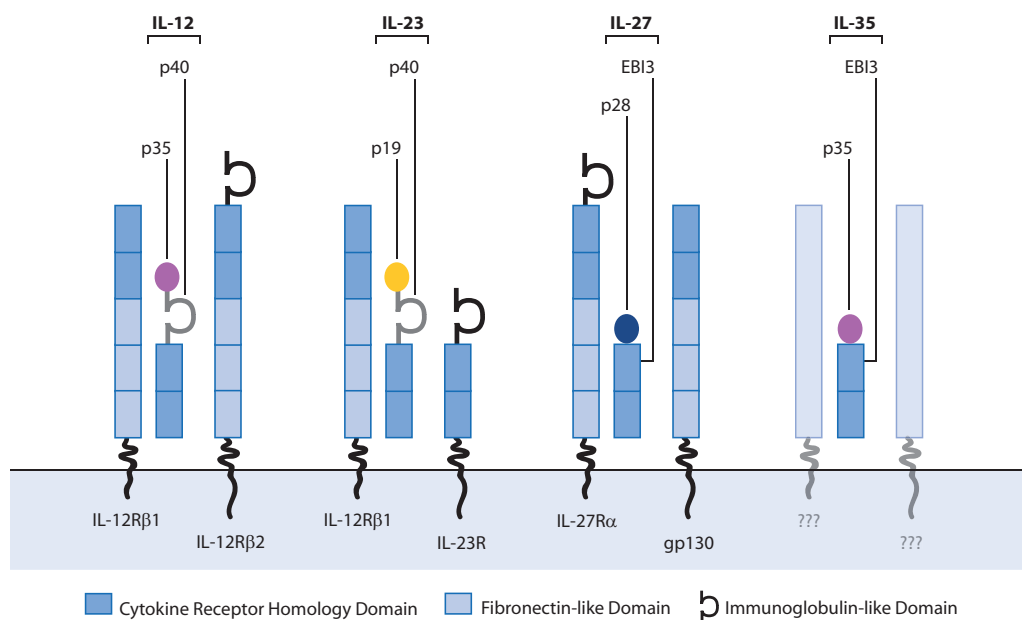


FIGURE: Interleukin-12 family members and their receptors. Adapted from *New IL-12-family members: IL-23 and IL-27, cytokines with divergent functions:* C.A. Hunter; Nat. Rev. Immunol. 5, 521 (2005)

IL-35 (human):Fc (human) (rec.)

[Interleukin-35 (human):Fc (human) (rec.)]
ALX-522-140-C010 10 µg

Produced in HEK 293 cells. Human EB13 (aa 21-229) linked to human IL-12A (aa 23-219) via the linker GGGGGGGGGGGGGGGG is fused at the C-terminus to the Fc portion of human IgG1 and a FLAG[®]-tag.

NEW

highlight

Also Available:

IL-12

IL-12/IL-23 p40 (human) ELISA Kit

BMS2013 1 Kit

IL-12 (p70) (human) ELISA Kit

BMS238 1 Kit

IL-12 (p70) (mouse) ELISA Kit

BMS6004 1 Kit

IL-12 (p40+p70) (mouse) ELISA Kit

BMS616 1 Kit

IL-12 (p70) (monkey) ELISA Kit

BMS646 1 Kit

IL-23

IL-23 (human) (rec.)

ALX-201-343-C010 10 µg

ALX-201-343-C050 50 µg

Produced in HEK 293 cells. Mature human IL-23 (interleukin-23) p40 peptide (aa 23-328) is fused at the C-terminus to a 18 aa linker peptide (GSTSGSGKPGSGEGSTKG) and to the mature p19 peptide (aa 20-189) and fused at the N-terminus to a FLAG[®]-tag. **BIOLOGICAL ACTIVITY:** Induction of IL-17 secretion by mouse splenocytes.

MAb to IL-23p19 (human) (I 178G)

ALX-804-710-C050 50 µg

ALX-804-710-C100 100 µg

CLONE: I 178G. **ISOTYPE:** Rat IgG2a. **IMMUNOGEN:** Recombinant human IL-23p19 (interleukin-23p19). **SPECIFICITY:** Recognizes human IL-23p19. **APPLICATION:** ELISA, WB.

MAb to IL-23p19 (human) (I 338H)

ALX-804-711-C050 50 µg

ALX-804-711-C100 100 µg

CLONE: I 338H. **ISOTYPE:** Rat IgG2a. **IMMUNOGEN:** Recombinant human IL-23p19 (interleukin-23p19). **SPECIFICITY:** Recognizes human IL-23p19. **APPLICATION:** ELISA, WB.

MAb to IL-23p40 (human) (I 1108)

ALX-804-716-C050 50 µg

ALX-804-716-C100 100 µg

CLONE: I 1108. **ISOTYPE:** Mouse IgG1. **IMMUNOGEN:** Recombinant human IL-23p40 (interleukin-23p40). **SPECIFICITY:** Recognizes human IL-23p40. Does not cross-react with human IL-23p19. **APPLICATION:** ELISA, WB.

PAb to IL-23p19

ALX-210-459-C100 100 µg

From rabbit. **IMMUNOGEN:** Recombinant mouse IL-23p19 (interleukin-23p19). **SPECIFICITY:** Recognizes mouse IL-23p19. Cross-reacts with human IL-23p19:Fc and human single chain IL-23. **APPLICATION:** ELISA, WB.

PAb to IL-23 (CT)

PSC-3793-C100 100 µg

From rabbit. **IMMUNOGEN:** Synthetic peptide corresponding to 16 aa near the C-terminus of human IL-23 (interleukin-23). **SPECIFICITY:** Recognizes human and mouse IL-23. **APPLICATION:** ICC, WB. **BP:** PSC-3793P.

PAb to IL-23 (NT)

PSC-3795-C100 100 µg

From rabbit. **IMMUNOGEN:** Synthetic peptide corresponding to 16 aa near the N-terminus of human IL-23 (interleukin-23). **SPECIFICITY:** Recognizes human and mouse IL-23. **APPLICATION:** IHC, WB. **BP:** PSC-3795P.

IL-23 (human) ELISA Kit

BMS2023/2 1 Kit

PAb to IL-23 Receptor

ALX-210-636-C200 200 µg

From goat. **IMMUNOGEN:** Synthetic peptide corresponding to aa 59-87 (C⁵⁹QPRKLHFYKNGIKERFQITRINKTTA-RL⁸⁷) of N-terminal domain of human IL-23 receptor. **SPECIFICITY:** Recognizes human and mouse IL-23 receptor. **APPLICATION:** IHC, ICC, WB. **BP:** ALX-159-018.

IL-27 / IL-27 Subunit β [EBI3]

NEW EBI3 (human):Fc (human) (rec.)

[Epstein-Barr Virus-induced Gene 3 (human):Fc (human) (rec.); IL-27 Subunit β (human):Fc (human) (rec.)]

ALX-201-419-C010 10 µg

ALX-201-419-C050 50 µg

Produced in HEK 293 cells. Full-length human Epstein-Barr Virus-induced Gene 3 (aa 1-229) is fused at the C-terminus to the Fc portion of human IgG1.

NEW PAb to EBI3 (human) (AT136)

ALX-210-962-C100 100 µg

From rabbit. **IMMUNOGEN:** Recombinant human EBI3 (aa 21-229). **SPECIFICITY:** Recognizes human EBI3. **APPLICATION:** WB.

PAb to IL-27 (IN)

PSC-3797-C100 100 µg

From rabbit. **IMMUNOGEN:** Synthetic peptide corresponding to 16 aa near the N-terminus of human IL-27 (interleukin-27). **SPECIFICITY:** Recognizes human and mouse IL-27. **APPLICATION:** WB. **BP:** PSC-3797P.

PAb to IL-27 (IN)

PSC-3799-C100 100 µg

From rabbit. **IMMUNOGEN:** Synthetic peptide corresponding to 14 aa near the center of human IL-27 (interleukin-27). **SPECIFICITY:** Recognizes human and mouse IL-27. **APPLICATION:** WB. **BP:** PSC-3799P.

SWITZERLAND/REST OF EUROPE

ALEXIS CORPORATION
T +41 61 926 89 89
F +41 61 926 89 79
E alexis-ch@alexis-corp.com

NORTH AMERICA

AXXORA, LLC
T (858) 658-0065/1-800-900-0065
F (858) 550-8825/1-800-550-8825
E axxora-usa@axxora.com

BENELUX

10P's AXXORA BVBA
T +32 (0) 3 466 04 20
F +32 (0) 3 466 04 29
E info@10Ps.com

GERMANY

AXXORA DEUTSCHLAND GmbH
T 07621 5500 522
Toll Free 0800 253 94 72
F 07621 5500 523
E axxora-de@axxora.com

UK

AXXORA (UK) Ltd.
T 01949 836111
F 01949 836222
E axxora-uk@axxora.com

International Distributors: Australia Sapphire Bioscience (02) 9698 2022 Austria Eubio (01) 8950145 Bangladesh Future Business Vision (02) 863 1173 Bosnia & Herzegovina A-Z Consulting +386 1 433 63 22 / +386 1 230 18 84 Brazil Biogenex (011) 3666 3565 / Sellex (011) 5506 4646 Canada Cedarlane Laboratories (289) 288-0001/1-800-268-5058 Chile Biocant (2) 683 2437 China Beijing Bitab Biotech (010) 8201 5225 / Boppard 21 6288 4751 (Shanghai) 20 8732 6381 (Guangzhou) / ITS China (021) 6481 4428/98 Colombia Lab Scientific +1 305 716 9922 Czech Republic Genetica (02) 7270 1055 Denmark Medinova Scientific 3956 2000 Ecuador Lab Scientific +1 305 716 9922 Egypt New Test For Scientific Service 03-358-3543 Estonia In vitro Eesti 630 65 20 Finland Nuppulinan Laboratoriopalvelu (02) 07920350 France CovalAb 0437 654 236 / Cogex (01) 45 33 67 17 Greece SB Bio-technology Suppliers (210) 823 3373 Hong Kong Boppard 2799 9019 Hungary Biomarker 28 419 986 India Hysel India 011-2622 78 01/02/03/04 / Imgenex India (01674 274 3265)/(01674 329 6544 Indonesia ITS Indonesia (021) 451 6222 Iran Hormoz Pajohan Lab. Equipment (021) 888 3444 Iraq Alwojoh (01) 515 8350 Ireland Alpha Technologies 045 865 440 / 0149 62 422 Israel Almog Diagnostic (03) 977 3390 Italy Vinci-Biochem 0571 568147 Japan BioLinks 03 5443 6891 Korea Chun Yang Tech (02) 929 8071 Lithuania & Latvia In vitro Eesti +372 630 65 20 Malaysia Interscience (03) 57 40 9888 Mexico Consultoria de Laboratorios (0155 1163 8840 The Netherlands 10P's Axxora 076 5425 184 New Zealand Sapphire Bioscience +61 2 9698 2022 Northern Ireland Alpha Technologies 028 28260558 Norway AH Diagnostics (23) 23 32 60 Pakistan The Worldwide Scientific (0)42-755-2355 Poland Biomob (022) 872 0797 Portugal Baptista Marques (21) 722 06 60 Romania Medist (21) 411 5003 Russia Chimmed 095 728 4192 Singapore ITS Science & Medical (06) 273 0898 Slovenia A-Z Consulting (01) 433 63 22 / (01) 230 18 84 South Africa Southern Cross Biotechnology (021) 611 57 66 Spain Grupo Taper 916 596 520 Sweden Immunkemi 08-58361500 / In vitro 08-306010 Syria New-Med Technology (11) 8827 1717 Taiwan Cashmere Scientific Company 0800 222 095/02-2567 5682 Thailand ITS Thailand (02) 308 0611 / Theera Trading (02) 412 5672 / (02) 418 1068 / S.M. Chemical Supplies (02) 542 1037 Turkey Tokra (312) 395 6009 Uruguay Lab Scientific +1 305 716 9922 Venezuela Lab Scientific +1 305 716 9922 Vietnam ITS Vietnam (08) 9255 232

ALEXIS[®]
BIOCHEMICALS

Available on

www.axxora.com