IL-17F Protein, Mouse (HEK293, His-Avi)

Cat. No.:	HY-P78321
Synonyms:	Cytokine ML-1; IL17F; IL-17F; IL24; IL-24; CANDF6; IL-17F; ML1
Species:	Mouse
Source:	HEK293
Accession:	Q7TNI7 (R29-A161)
Gene ID:	257630
Molecular Weight:	30-35 kDa

PROPERTIES

Biological Activity	Immobilized Mouse IL-17F, His Tag at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Mouse IL-17R alpha, hFc Tag with the EC_{50} of 1.25μg/ml determined by ELISA.
Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

Interleukin-17F (IL-17F) belongs to the IL-17 cytokine family. IL-17F is expressed in activated CD4 T cells, activated monocytes, basophils and mast cells. IL-17F can be produced by differentiated TH17 cells, lamina propria T cells, memory $CD4^+$ T cells, γδ T cells and NKT cells[1].

The mouse IL-17F shares 55.90% amino acid sequence identity with human and 86.34% identity with rat.

IL-17F is an inflammatory cytokine that induces many proinflammatory cytokines and chemokines, including TGF-β, IL-2, ICAM1, GM-CSF, CCL2, CCL7, TSLP, MMP13, IL-6 and CXCL1. IL-17F also induces antimicrobial peptides including hBD-2, S100A7, S100A8 and S100A9 with IL-22 and can synergize with IL-23 in human eosinophils to promote the production of IL-1 β and IL-6. IL-17F is a homodimeric cytokine. IL-17F shares the most similarities with IL-17A (50% homology) and can be produced as an IL-17AF heterodimer. IL-17A, IL-17F and IL-17A/F use the same receptor complex: IL-17RA and IL-17RC heterodimer. They trigger qualitatively similar signaling pathways, and IL-17F exhibits the lowest biological activity. IL-17F shows about 100–1000 times lower affinity to the IL-17RA subunit than IL-17A, and does not compete with IL-17A binding to IL-17RA[1][2].

IL-17F plays a protective role in colon cancer development and can be used for the research of autoimmune diseases,

infection and cancer[1][3][4].

REFERENCES

[1]. Chang SH, et al. IL-17F: regulation, signaling and function in inflammation. Cytokine. 2009 Apr;46(1):7-11.

[2]. McGeachy MJ, et al. The IL-17 Family of Cytokines in Health and Disease. Immunity. 2019 Apr 16;50(4):892-906.

[3]. Ferreira N, et al. IL-17A and IL-17F orchestrate macrophages to promote lung cancer. Cell Oncol (Dordr). 2020 Aug;43(4):643-654.

[4]. Tong Z, et al. A protective role by interleukin-17F in colon tumorigenesis. PLoS One. 2012;7(4):e34959.

[5]. Yang XO, et al. Regulation of inflammatory responses by IL-17F. J Exp Med. 2008 May 12;205(5):1063-75.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA