



Human Th17 Cell Polarizing Plus Protein Bundle

Catalog Number: PB-500-12

Protein Bundle Includes:

Human IL-6 (Catalog 100-10)	20 ug vial
Human TGF-beta 1 (Catalog 100-39)	5 ug vial
Human IL-1 beta (Catalog 100-167)	10 ug vial
Human IL-21 (Catalog 100-90)	100 ug vial

Bundle Description:

T helper 17 cells (Th17) are a distinct type of T cell subset that are thought to be important in immunity against microbes at the epithelial and mucosal interfaces of the body. Disruption of the regular function or balance of Th17 cells is thought to be involved in several autoimmune diseases and/or opportunistic infections. Th17 cells are characterized by their ability to produce IL-17, IL-22 and IL-21. Th17 cells can be cultured from naive CD4+ T cells by culturing them in the presence of anti-CD3, anti-CD28, recombinant IL-6 (at 10 -30 ng/mL) and recombinant TGF-beta 1 (at 1-5 ng/mL). In some cases neutralizing antibodies against IL-12, IL-4 and IFN γ are used along with recombinant cytokines IL-1 beta (at 10-12.5 ng/mL), IL-21 (25-100 ng/mL) and/or IL-23 (10 -25 ng/mL).

Notes: Dependent on user formulation, there is approximately enough IL-6, TGF-beta 1, IL-1 beta and IL-21 to make 1 L of differentiation media. Specific concentrations of each chemokine are determined by the end user based on their application and culture conditions.

References:

- Beriou et al. (2010) J Immunol. 185(1):46
- Zhu et al. (2009) JEM. 206 (2): 329
- Elyamen et al. (2009) PNAS. 106 (31): 12885
- Elias et al. (2008) BLOOD. 111 (3): 1014
- Laurence et al. (2007) Immunity 26: 379

THIS PRODUCT IS FOR RESEARCH USES ONLY AND IS NOT FOR USE IN HUMANS!