



Recombinant Protein Technical Manual

Recombinant Human IL27Ra/TCCR/WSX1 Protein (Fc Tag)(Active)

RPES4017

Product Data:

Product SKU: RPES4017

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_004834.1

Protein Information:

Molecular Mass: 79 kDa

AP Molecular Mass: 10515 kDa

Tag: C-Fc

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human IL27 at 20 µg/ml (100 µl/well) can bind human IL27Ra with a linear ranger of 0.064.6 µg/ml.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4, 8% trehalose, 8% mannitol

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: CRL1;IL-27RA;IL27R;TCCR;WSX1;zcytor1

Immunogen Information:

Sequence: Met 1-Arg 514

Background:

The interleukin-27 receptor is a type I cytokine receptor for interleukin-27. It is a heterodimer composed of the interleukin 27 receptor, alpha subunit and glycoprotein 130. WSX/IL-27R, a class I cytokine receptor that is homologous to the $\beta 2$ chain of the IL2R in both sequence and structure, is highly expressed by resting/naive CD4+ T cells and CD8+ T cells. WSX/IL-27R belongs to the IL-6/IL2 family of cytokines and induced proliferation of naive CD4(+) T cells and the generation of a Th1-type adaptive immune response. WSX/IL-27R functions as a receptor for IL27. IL-27 not only contributes to the development of an adaptive immune response through its action on CD4(+) T cells, it also directly acts on cells of the innate immune system. WSX/IL-27R requires IL6ST/gp130 to mediate signal transduction in response to IL27. This signaling system acts through STAT3 and STAT1. It is involved in the regulation of Th1-type immune responses. IL-27R also appears to be involved in innate defense mechanisms. IL27RA is essential for transcriptional activation of STAT1 and for augmenting the induction of T-bet expression during initiation of Th1 cell differentiation.