



# Recombinant Protein Technical Manual

## Recombinant Human Interleukin7D/IL7D Protein

RPES1671

### Product Data:

**Product SKU:** RPES1671

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q8TAD2

### Protein Information:

**Molecular Mass:** 20.3 kDa

**AP Molecular Mass:** 20 kDa

**Tag:**

**Bio-activity:**

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

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

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of 4mM HCl.

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

**Application:**

**Synonyms:** Interleukin7D; IL7D;IL17D

## Immunogen Information:

**Sequence:** Ala18-Pro202

## Background:

The Interleukin7 family proteins, comprising six members (IL7, IL7B through IL7F), are secreted, structurally related proteins that share a conserved cysteine-knot fold near the C-terminus, but have considerable sequence divergence at the N-terminus. IL7 family proteins are proinflammatory cytokines that induce local cytokine production and are involved in the regulation of immune functions. Among IL7 family members, IL7D is most closely related to IL7B, sharing 27% aa sequence homology. IL7D is expressed preferentially in skeletal muscle, heart, adipose tissue, lung, pancreas, and nervous system. Like other IL7 family members, IL7D modulates immune responses indirectly by stimulating the production of myeloid growth factors and chemokines including IL-6, IL-8, and GM-CSF. IL7D has also been shown to suppress the proliferation of myeloid progenitors in colony formation assays.