

**DESCRIPTION**

<b>Source</b>	Chinese Hamster Ovary cell line, CHO-derived
	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Human IL-17A (Gly24-Ala155) Accession # Q16552</div> <div style="border: 1px solid black; padding: 5px;">Human IL-17F (Arg21-GLN163) Accession # Q96PD4</div>
	N-terminus <span style="float: right;">C-terminus</span>
<b>N-terminal Sequence Analysis</b>	Gly24(IL-17A) & Arg21(IL-17F)
<b>Structure / Form</b>	Disulfide-linked heterodimer, Biotinylated via sugars
<b>Predicted Molecular Mass</b>	15 kDa (unlabeled IL-17A), 15 kDa (unlabeled IL-17F)

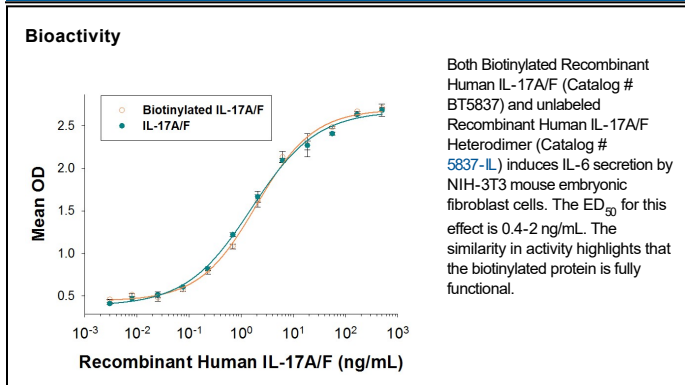
**SPECIFICATIONS**

<b>Activity</b>	Measured by its ability to induce IL-6 secretion by NIH-3T3 mouse embryonic fibroblast cells. The ED <sub>50</sub> for this effect is 0.4-2 ng/mL.
<b>Endotoxin Level</b>	<1.0 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in HCl with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 100 µg/mL in 4 mM HCl containing at least 0.1% human or bovine serum albumin
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**DATA**



**BACKGROUND**

Human IL-17A/F is an approximately 40 kDa, secreted, disulfide-linked heterodimeric glycoprotein comprised of two members of the IL-17 family of cytokines, IL-17A and IL-17F (1, 2). Members of this family demonstrate a structural motif termed a cysteine knot that also characterizes a large superfamily of growth factors. Although most cysteine knot superfamily members use three intrachain disulfide bonds to create a knot, IL-17 family molecules generate the same structural form with only two disulfide links (3-5). Mature human IL-17A and IL-17F share 61% and 56% amino acid sequence identity with mouse IL-17A and IL-17F, respectively. They share 50% aa sequence identity with each other. IL-17A/F and the IL-17A and IL-17F homodimers are produced by IL-23 activated Th17 cells (1, 6-10). The widely expressed receptors IL-17 RA and IL-17 RC form a heterodimer for the binding of IL-17A and IL-17F, as well as the heterodimeric IL-17A/F (6, 11, 12). IL-17A/F is a biologically active protein that induces chemokine production and airway neutrophilia with intermediate potency between IL-17A (most potent) and IL-17F (least potent) (7, 12). It is up-regulated in immune cells during inflammatory arthritis and contributes to disease severity (13).

**References:**

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