

ChemWhat Recombinant Human Interleukin-36 alpha, 153a.a.
A brand under Watson (rHuIL-36 α , 153a.a.)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	101-36B
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 17.1 kDa, a single non-glycosylated polypeptide chain containing 153 amino acids.
Quantity:	2 μ g/10 μ g/1000 μ g
AA Sequence:	KIDTPQQGSI QDINHRVWVL QDQTLIAVPR KDRMSPVTIA LISCRHVETL EKDRGNPIYL GLNGLNLCLM CAKVGDQPTL QLKEKDIMDL YNQPEPVKSF LFYHSQSGRN STFESVAFPG WFIAVSSEGG CPLILTQELG KANTTDFGLT MLF
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by inducing IL-8 secretion in human preadipocytes is less than 10 ng/ml, corresponding to a specific activity of > 1.0 \times 10 ⁵ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM Tris, 300 mM NaCl, pH 8.0, 0.1 % Tween 80.
Endotoxin:	Less than 1 EU/ μ g of rHuIL-36 α , 153a.a. as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at \leq -20 $^{\circ}$ C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 $^{\circ}$C as supplied.● 1 month, 2 to 8 $^{\circ}$C under sterile conditions after reconstitution.● 3 months, -20 to -70 $^{\circ}$C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Interleukin-36 alpha

Interleukin-36 (IL-36) is a pro-inflammatory cytokine which plays an important role in the pathophysiology of several diseases. IL-36 α , IL-36 β , and IL-36 γ (formerly IL-1F6, IL-1F8, and IL-1F9) are IL-1 family members that signal through the IL-1 receptor family members IL-1Rrp2 (IL-1RL2) and IL-1RAcP. Studies showed IL-36 α is mainly found in skin and lymphoid tissues, but also in fetal brain, trachea, stomach and intestine. Notably, IL-36 alpha is the only novel IL-1 family member expressed on T-cells. Recombinant human interleukin-36 alpha (153 a.a.) contains 153 amino acids residues which is a single non-glycosylated polypeptide and it shares 57 – 68 % a.a. sequence identity with mouse, rabbit, equine and bovine IL-36 α and 27 – 57 % a.a. sequence identity with other novel IL-1 family members.