

Animal, Bacterial & Viral Free - Low Endotoxin - Ultra Pure - High BioActivity

## FLT3LG

## Recombinant Human Fms-related Tyrosine Kinase 3 Ligand, FLT3L, Endotoxin Free

**Catalog No.** CRF133A **Quantity**: 10 μg

CRF133B 50  $\mu g$  CRF133C 1 mg CRF133D 100  $\mu g$ 

Alternate Names: FLT3 Ligand, FL, Flk-2 ligand, FLT3L, Ly72L, Ly72 ligand, STK-1 ligand

**Gene ID:** 2323 **UniProtKB:** P49771

**Description:** FLT3 Ligand is a hematopoietic four helical bundle cytokine. It is structurally homologous

to stem cell factor and colony stimulating factor 1. In synergy with other growth factors and interleukins, FLT3 Ligand stimulates the proliferation and differentiation of early hematoepoietic cells. It is a major growth factor stimulating the growth of dendritic cells.

Recombinant human FLT3L contains 156 amino acids and a 16aa His-tag.

**Source:** Hordeum vulgare (barley grain). Barley grain exhibits up to 50 times less protease activity

than *E.coli* or mammalian cells. Barley seed is void of any human or animal viral

contaminants that could jeopardize stem cell culture.

Molecular Weight: The predicted molecular weight of the recombinant FLT3 Ligand is 19.9 kDa, but the

recombinant protein migrates as two bands with an apparent molecular mass of 20 and

22 kDa in SDS-PAGE as a result of glycosylation.

Formulation: Lyophilized from a 0.2 μm sterile filtered solution of PBS, pH 7.2

**Purity:** >95% by SDS-PAGE.

Purified product carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6, TNF-

alpha and IL-1beta induction.

**Endotoxin Level:** < 0.05EU/μg, < 0.005 ng/μg of FLT3 Ligand

**Biological Activity:** ED<sub>50</sub>< 0.3 ng/ml, determined by dose-dependent proliferation of recombinant human

FLT3 Ligand on AML5 cells.

**Specific Activity:** >3.3 x 10<sup>6</sup> units/mg

Reconstitution: Centrifuge vial before opening. Reconstitute the lyophilized protein using sterile

distilled water to a concentration no less than 0.1 mg/ml.

Storage & Stability: Store lyophilized protein at -20°C and reconstituted protein in working aliquots at -20°C

with a carrier protein (0.1% HSA or BSA) as a stabilizer for long term storage. Please note that the addition of any carrier protein into this product may introduce endotoxin. Depending upon the particular application employed, this may be

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undesirable. Avoid repeated freeze-thaw cycles.

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