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## 32-5053: Recombinant Human T-cell Leukemia/Lymphoma 1A

Alternative Name: T-cell leukemia/lymphoma protein 1A, Protein p14 TCL1, Oncogene TCL-1, Oncogene TCL1, TCL1A, TCL1.

## **Description**

Source: Escherichia Coli. TCL1A Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 114 amino acids (1-114 a.a.) and having a molecular mass of 13.4kDa.The TCL1A is purified by proprietary chromatographic techniques. TCL1A (T-cell leukemia/lymphoma 1A) is a protein with a possible role in intracellular regulation of T cell signaling. TCL1A enhances cell proliferation, stabilizes mitochondrial membrane potential and promotes cell survival. TCL1A is restricted in the T-cell lineage to immature thymocytes and activated peripheral lymphocytes. TCL1A is preferentially expressed early in T and B-lymphocyte differentiation. Chromosomal anomalies activating TCL1A are found in chronic T-cell leukemias (T-CLL). TCL1A enhances the phosphorylation and activation of AKT1, AKT2 and AKT3. TCL1A promotes nuclear translocation of AKT1. TCL1A binds to the pleckstrin homology domain of Akt (protein kinase B) family proteins, which facilitates Akt dimerization and activity. By increasing Akt activity, TCL1A can enhance the serine/threonine phosphorylation of major Akt signaling substrates, for example lkk complex, mTOR, BAD, p70S6 kinase, FOXO transcription factors and GSK3b. These substrates regulate cellular differentiation, growth, survival, and metabolism.

## **Product Info**

Amount:  $50 \mu g$ 

**Purification:** Greater than 90.0% as determined by SDS-PAGE.

Content: The TCL1A protein solution contains 50mM Tris-HCl buffer (pH7.5) and 10% glycerol.

TCL1A although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term

Storage condition: storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw

cycles.

Amino Acid: MAECPTLGEA VTDHPDRLWA WEKFVYLDEK QHAWLPLTIE IKDRLQLRVL LRREDVVLGR

PMTPTQIGPS LLPIMWQLYP DGRYRSSDSS FWRLVYHIKI DGVEDMLLEL LPDD.

