
Product Data Sheet

Product Name: TCL1A Human
 Cat. No.: GP24798
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	T-cell leukemia/lymphoma protein 1A; Protein p14 TCL1; Oncogene TCL-1; Oncogene TCL1; TCL1A; TCL1.		
Amino Acid Sequence	MAECP TLG EA VTDHPDRLWA WEK FVYLDEK QHAWLPLTIE IKDRLQLRVL LRREDVVLGR PMTPTQIGPS LLPIMWQLYP DGRYRSSDSS FWRLVYHIKI DGVEDMLLEL LPDD.		
Formulation	The TCL1A protein solution contains 50mM Tris-HCl buffer (pH7.5) and 10% glycerol.		

Introduction

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 Ikk complex, mTOR, BAD, p70S6 kinase, FOXO transcription factors and GSK3b. These substrates regulate cellular differentiation, growth, survival, and metabolism.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

Caution: Product has not been fully validated for medical applications. For research use only.

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periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

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.

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