

Recombinant Human APRIL / A Proliferation-Inducing Ligand, Animal Free & Carrier Free

Cat #: C-CYP217

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

APRIL (A Proliferation-Inducing Ligand) is a member of the tumor necrosis factor family. APRIL shows high levels of expression in tumors of different origin and low level of expression in normal cells. APRIL shares two TNF receptor family members, TACI and BCMA (or another TNF homolog, BlyS/BAFF) have been reported to play a role in autoimmune disease and cancer. The protein encoded by this gene is a member of the tumor necrosis factor ligand (TNF) ligand family. This protein is a ligand for TNFRSF17/ BCMA, a member of the TNF receptor family. This protein and its receptor are both found to be important for B cell development. In vivo experiments suggest an important role for APRIL in the long-term survival of plasma cells in the bone marrow. Mice deficient in APRIL have normal immune system development. However, APRIL-deficient mice have also been reported to possess a reduced ability to support plasma cell survival. In vitro experiments suggested that this protein may be able to induce apoptosis through its interaction with other TNF receptor family proteins such as TNFRSF6/FAS and TNFRSF14 /HVEM. Three alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measured by its ability to induce cell death in Jurkat cells. The ED₅₀ for this effect is 2.6-4.0 µg/mL

Endotoxin: <0.1 EU per 1 µg of the protein by the LAL method.

Amino acid sequence:

MAVLTQKQKKQHSLVHLVPINATSKDDSDVTEVMWQPALRRRGRGLQAQGYGVRIQDAGVYLLYSQVLFQDVTFTMGQVVSREGQGRQ
ETLFRSMPSHPDRAVNSCYSAGVFHLHQGDILSVIIPRARAKLNLSPHGTFGLGFVKL with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1X PBS, containing 0.1% sarkosyl, pH 8.0.



SDS-PAGE analysis of recombinant human APRIL

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.