

Recombinant Human APRIL protein(His Tag)

Catalog Number: PKSH034120

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	E.coli-derived Human APRIL protein Ala 1-Leu 146, with an C-terminal His
Calculated MW	17.3 kDa
Observed MW	18 kDa
Accession	AAQ91388
Bio-activity	Measured by its ability to induce cell death in Jurkat cells. The ED ₅₀ for this effect is 2.6-4.0 µg/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS with 0.1% sarkosyl,pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

APRIL (a proliferation-inducing ligand), also known as TNFSF13, TALL2, TRDL1, and CD256, is a member of the TNF ligand superfamily. It is synthesized as a 32 kDa proprotein which is cleaved by furin in the Golgi to release the active 17 kDa soluble molecule. Secreted human APRIL, which consists almost entirely of a single TNF homology domain, shares 85% amino acid sequence identity with mouse and rat APRIL. Both APRIL and its close relative BAFF bind and signal through the TNF superfamily receptors TACI and BCMA, while BAFF additionally functions through BAFF R. APRIL binds to heparan sulfate proteoglycans (HSPGs) independently of its binding to TACI and BCMA. APRIL can form bioactive heterotrimers with BAFF, and these circulate in the serum of patients with rheumatic immune disorders. APRIL enhances the proliferation and survival of plasma cells and also promotes T cell-dependent humoral responses. APRIL levels are elevated in the serum during coronary artery disease, and it is also elevated in many cancers primarily due to expression by tumor-infiltrating neutrophils.

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