

Recombinant Mouse soluble A Proliferation-inducing Ligand/TNFSF13 (Mouse sAPRIL/TNFSF13)

Product Information

Product Name	Cat#	Size
Recombinant Mouse soluble A Proliferation-inducing Ligand/TNFSF13 (Mouse sAPRIL/TNFSF13)	90623ES08	5 µg
	90623ES60	100 µg
	90623ES76	500 µg

Product Description

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. The interaction with HSPGs induces APRIL oligomerization, and this augments TACI-, or BCMA-mediated effects. HSPGs are also critical for the tumor growth-promoting effects attributed to APRIL. APRIL can form bioactive heterotrimers with BAFF, and these circulate in the serum of patients with rheumatic immune disorders. TWE-PRIL is a bioactive hybrid protein produced by gene splicing. It consists of the intracellular domain, transmembrane segment, and stalk region of TWEAK fused to the TNF homology domain of APRIL. TWE-PRIL is expressed in monocytes and activated T cells and, in contrast to APRIL, is presented on the cell surface. APRIL enhances the proliferation and survival of plasma cells and also promotes T cell-dependent humoral responses.

Product Properties

Synonyms	CD253; Protein TRAIL; TL2
Accession	P50592
GeneID	22035
Source	E.coli-derived Mouse TRAIL/TNFSF10, Pro118-Asn291.
Molecular Weight	Approximately 20.2 kDa.
AA Sequence	MPRGGRPQKV AAHITGITRR SNSALIPISK DGKTLGQKIE SWESSRKGHS FLNHVLFNRNG ELVIEQEGLY YIYSQTYFRF QEAEDASKMV SKDKVVRTKQL VQYIYKYTSY PDPIVLMKSA RNSCWSRDAE YGLYSIQGG LFELKKNDRIFVSVTNEHLM DLDQEASFFG AFLIN
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cytotoxicity assay using murine L929 cells is less than 0.5 ng/mL, corresponding to a specific activity of > 2.0 × 10 ⁶ IU/mg in the presence of actinomycin D. Fully biologically active when compared to standard.
Endotoxin	< 0.1 EU per 1µg of the protein by the LAL method.

Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4, with 3 mM DTT. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!