CELL APPLICATIONS, INC.

RECOMBINANT PROTEINS

Human Tumor Necrosis Factor Receptor Type 1

SIZE	CAT. NO.
20 ug	RP1035-20
100 ug	RP1035-100
1000 ug	RP1035-1000

BACKGROUND

TNF Receptor I (TNFR1) is expressed in most tissues and is activated by soluble and membrane-bound TNF-α. TNFR1 is known to activate NF-κB and MAPK pathways and functions to induce inflammation, promote apoptotic cell death, inhibit tumorigenesis and inhibit viral replication.

The soluble form of human recombinant TNFR1 is a non-glycosylated protein, containing 192 amino acids and having a molecular mass of 20.9 kDa.

Alternative Names:
TNFAR, CD120a, TNFRSF1A, TNFR55

Amino Acid Sequence:
MDSVCPQGKY IHPQNNSICC TKCHKGTYLY NDCPGPGQDT
DCRECESSGSF TASENHLRHC LSCSKCRKEM GQVEKSSCTV
DRDTVCGCRK NQYRHYWSEN LFQCFNCSLC LNGTVHLSCQ
EKQNTVCTCH AGFFLRENEC VSCSNCKKSL ECTKLCLPQI EN

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
Recombinant human TNFR1 is lyophilized from 10 mM Na2PO4, pH 7.5.

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is determined by its ability to inhibit the cytolytic effects 0.25 ng/mL TNFα has on mouse L929 cells, in the presence of Actinomycin D, and is typically between 0.045 and 0.09 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.