Technical Data Sheet

Recombinant Human TNF-related Weak Inducer of Apoptosis Receptor (rHuTWEAK Recepor)

Human TNF-related Weak Inducer of Apoptosis Receptor

Human TNF-related weak inducer of apoptosis receptor (TWEAKR) also known as Tumor necrosis factor receptor superfamily member 12A precursor (gene name TNFRSF12A) or fibroblast growth factor-inducable 14 kDa protein, is distantly related to the TNFR family, containing one cysteine-rich domain in the extracellular region and a TNFR-associated factor binding domain but does not contain a death domain (DD) cytoplasmic region. It is expressed in the spleen, thymus, peripheral blood lymphocytes, colon, and small intestine. Signal transduction by TWEAK receptor can be activated by either the membrane anchored or the soluble TWEAK. In addition, It plays a role in TWEAK-induced endothelial cell migration, proliferation, and angiogenesis. Human and mouse TWEAK R share 82 % a.a. sequence identity.

Catalog Number:	RC214-23R
Source:	*Escherichia coli.*
Molecular Weight:	Approximately 5.6 kDa, a single non-glycosylated polypeptide chain containing 53 amino acids.
Quantity:	5μg/25μg/1000μg
AA Sequence:	EQAPGTAPCS RGSSWSADLD KCMDCASCRA RPHSDFCLGC AAAPPAPFRL LWP
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED_{50} as determined by inhibiting TWEAK-dependent proliferation of human umbilical vein endothelial cells (HUVEC) is less than 30 ng/ml, corresponding to a specific activity of > 3.3×10^4 IU/mg, in the presence of 15 ng/ml of rHuTWEAK.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/μg of rHuTWEAK Receptor as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. 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 ≤ -20 °C. Further

	dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.
Usage:	This material is offered by Bio Basic Canada Inc. for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.