

Recombinant Protein Technical Manual Recombinant Rat XEDAR/EDA2R Protein (His Tag)

RPES4928

Product Data:

Product SKU: RPES4928 **Size:** 50μg

Species: Rat Expression host: HEK293 Cells

Uniprot: D3ZAX4

Protein Information:

Molecular Mass: 16.7 kDa

AP Molecular Mass: 27 kDa

Tag: C-His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ of the protein as determined by the LAL method

Storage: 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, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: EDA2R

Immunogen Information:

Sequence: Met2-Glu137

Background:

Tumor necrosis factor receptor superfamily member 27, also known as X-linked ectodysplasin-A2 receptor, EDA-A2 receptor, EDA2R, XEDAR and TNFRSF27, is a single-pass type I II membrane protein. TNFRSF27 / EDA2R contains three TNFR-Cys repeats. It is a new member of the tumor necrosis factor receptor family that has been shown to be highly expressed in ectodermal derivatives during embryonic development and binds to ectodysplasin-A2 (EDA-A2). TNFRSF27 / EDA2R is a receptor for EDA isoform A2, but not for EDA isoform A1. TNFRSF27 / EDA2R mediates the activation of the NF-kappa-B and JNK pathways. The activation seems to be mediated by binding to TRAF3 and TRAF6. Ectodysplasin, a member of the tumor necrosis factor family, is encoded by the anhidrotic ectodermal dysplasia EDA gene. Mutations in EDA give rise to a clinical syndrome characterized by loss of hair, sweat glands, and teeth. EDA-A1 and EDA-A2 are two isoforms of ectodysplasin that differ only by an insertion of two amino acids. This insertion functions to determine receptor binding specificity, such that EDA-A1 binds only the receptor EDAR, whereas EDA-A2 binds only the related, but distinct, X-linked ectodysplasin-A2 receptor (XEDAR).