



# Recombinant Protein Technical Manual

**Recombinant Human XEDAR/EDA2R Protein (His Tag)**  
RPES4937

## Product Data:

**Product SKU:** RPES4937

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_068555.1

## Protein Information:

**Molecular Mass:** 16.7 kDa

**AP Molecular Mass:** 33 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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:** EDA-A2R;EDAA2R;TNFRSF27;XEDAR

## Immunogen Information:

**Sequence:** Met 1-Thr 138

## 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).