

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human EDA-A2/Ectodysplasin A2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, 100% cross-reactivity with recombinant human (rh) EDA-A1 is observed, approximately 10% cross-reactivity with recombinant mouse ED
Source	Monoclonal Mouse IgG ₁ Clone # 174813
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human EDA-A2/Ectodysplasin A2 Ala179-Ser389 Accession # NP_001005609
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

EDA-A2, a product of the EDA gene (also called Tabby), is a type II transmembrane protein that is a member of the TNF Superfamily (TNFSF). Human EDA-A2 is a 389 amino acid (aa) protein with a predicted N-terminal 39 aa cytoplasmic domain, a 22 aa transmembrane domain and a C-terminal 328 aa extracellular domain. The extracellular domains of human and mouse EDA-A2 share approximately 94% identity. Within the TNFSF, EDA-A2 shares the highest homology with EDA-A1, the other product of the EDA gene. EDA-A2 and EDA-A1 are splice variants of EDA which differ by only two amino acids. EDA-A1 contains two additional amino acids, Glu308 and Val309. Despite this minor difference, the EDA isoforms display strong receptor specificity. EDA-A1 only binds EDAR, a member of the TNF Receptor Superfamily (TNFRSF), whereas EDA-A2 binds to XEDAR, an X-linked TNFRSF family member with high homology to EDAR. Mutations in EDA-A1, EDA-A2, EDAR and XEDAR have been associated with hypohidrotic ectodermal dysplasia (HED). HED is characterized by abnormalities in hair, teeth and eccrine sweat gland morphogenesis. HED was initially found to associate with two gene loci, tabby and downless. Tabby was later identified as the gene for EDA and downless as the autosomal EDAR gene.

PRODUCT SPECIFIC NOTICES

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