

EDA Rabbit pAb

Catalog # AP99294

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q92838
Other Accession	Q92838
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41294
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Ectodysplasin-A, membrane form
Epitope Specificity	101-200/391
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the tumor necrosis factor family. Contains 1 collagen-like domain.
SUBUNIT	Homotrimer. The homotrimers may then dimerize and form higher-order oligomers.
Post-translational modifications	N-glycosylated. Processing by furin produces a secreted form.
DISEASE	Ectodermal dysplasia 1, hypohidrotic, X-linked (XHED) [MIM:305100]: A form of ectodermal dysplasia, a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. Characterized by sparse hair (atrachosis or hypotrichosis), abnormal or missing teeth and the inability to sweat due to the absence of sweat glands. It is the most common form of over 150 clinically distinct ectodermal dysplasias. Note=The disease is caused by mutations affecting the gene represented in this entry.Tooth agenesis selective X-linked 1 (STHAGX1) [MIM:313500]: A form of selective tooth agenesis, a common anomaly characterized by the congenital absence of one or more teeth. Selective tooth agenesis without associated systemic disorders has sometimes been divided into 2 types: oligodontia, defined as agenesis of 6 or more permanent teeth, and hypodontia, defined as agenesis of less than 6 teeth. The number in both cases does not include absence of third molars (wisdom teeth). Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by the EDA gene is a type II membrane protein that can be cleaved by furin to produce a secreted form. The encoded protein, which belongs to the tumor necrosis factor family, acts as a homotrimer and may be involved in cell-cell signaling during the development of ectodermal organs. Defects in the EDA gene are a cause of ectodermal dysplasia, anhidrotic, (this is also known as X-linked hypohidrotic ectodermal dysplasia). Several transcript variants encoding many different isoforms have been found for this gene. AltName: ectodermal dysplasia protein; Ectodysplasin-A; EDA protein homolog; Tabby protein; Ectodysplasin-A, membrane form; secreted form EDA-A5.

Additional Information

Gene ID	1896
Other Names	EDA_HUMAN; EDA; Ectodermal dysplasia protein (EDA protein); ED1; EDA2; EDA_MOUSE; EDA protein homolog; Tabby protein; Ta; ectodysplasin A; ectodermal dysplasia 1, anhidrotic; oligodontia 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	EDA
Synonyms	ED1, EDA2
Function	Cytokine which is involved in epithelial-mesenchymal signaling during morphogenesis of ectodermal organs. Functions as a ligand activating the DEATH-domain containing receptors EDAR and EDA2R (PubMed: 11039935 , PubMed: 27144394 , PubMed: 34582123 , PubMed: 8696334). May also play a role in cell adhesion (By similarity).
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:O54693}; Single-pass type II membrane protein {ECO:0000250 UniProtKB:O54693}
Tissue Location	Not abundant; expressed in specific cell types of ectodermal (but not mesodermal) origin of keratinocytes, hair follicles, sweat glands. Also in adult heart, liver, muscle, pancreas, prostate, fetal liver, uterus, small intestine and umbilical cord {ECO:0000269 Ref.6}

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