

Product Name: p63 Rabbit Polyclonal Antibody
Catalog #: APRab15660



Summary

Production Name	p63 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IF,ELISA
Reactivity	Human,Mouse,Rat,Monkey

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	TP63 TP63; KET; P63; P73H; P73L; TP73L; Tumor protein 63; p63; Chronic ulcerative stomatitis protein; CUSP; Keratinocyte transcription factor KET; Transformation-related protein 63; TP63; Tumor protein p73-like; p73L; p40; p51
Alternative Names	
Gene ID	8626.0
SwissProt ID	Q9H3D4.The antiserum was produced against synthesized peptide derived from human p63. AA range:631-680

Application

Dilution Ratio	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
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Molecular Weight 77kD

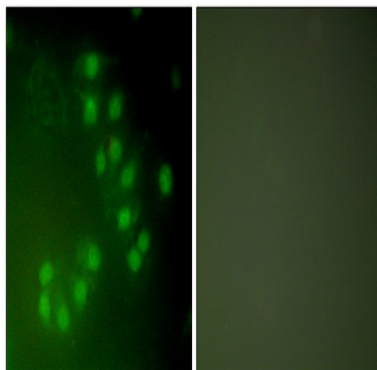
Background

tumor protein p63(TP63) Homo sapiens This gene encodes a member of the p53 family of transcription factors. The functional domains of p53 family proteins include an N-terminal transactivation domain, a central DNA-binding domain and an oligomerization domain. Alternative splicing of this gene and the use of alternative promoters results in multiple transcript variants encoding different isoforms that vary in their functional properties. These isoforms function during skin development and maintenance, adult stem/progenitor cell regulation, heart development and premature aging. Some isoforms have been found to protect the germline by eliminating oocytes or testicular germ cells that have suffered DNA damage. Mutations in this gene are associated with ectodermal dysplasia, and cleft lip/palate syndrome 3 (EEC3); split-hand/foot malformation 4 (SHFM4); ankyloblepharon-ectodermal defects-cleft lip/palate; ADULT syndrome (acro-dermato-ungual-lacrimofactor: Binds 1 zinc ion per subunit., disease: Defects in TP63 are a cause of cervical, colon, head and neck, lung and ovarian cancers., disease: Defects in TP63 are a cause of ectodermal dysplasia Rapp-Hodgkin type (EDRH) [MIM:129400]; also called Rapp-Hodgkin syndrome or anhidrotic ectodermal dysplasia with cleft lip/palate. Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. EDRH is characterized by the combination of anhidrotic ectodermal dysplasia, cleft lip, and cleft palate. The clinical syndrome is comprised of a characteristic facies (narrow nose and small mouth), wiry, slow-growing, and uncombable hair, sparse eyelashes and eyebrows, obstructed lacrimal puncta/epiphora, bilateral stenosis of external auditory canals, microsomia, hypodontia, cone-shaped incisors, enamel hypoplasia, dystrophic nails, and cleft lip/cleft palate., disease: Defects in TP63 are the cause of acro-dermato-ungual-lacrimal-tooth syndrome (ADULT syndrome) [MIM:103285]; a form of ectodermal dysplasia. Ectodermal dysplasias (EDs) constitute a heterogeneous group of developmental disorders affecting tissues of ectodermal origin. EDs are characterized by abnormal development of two or more ectodermal structures such as hair, teeth, nails and sweat glands, with or without any additional clinical sign. Each combination of clinical features represents a different type of ectodermal dysplasia. ADULT syndrome involves ectrodactyly, syndactyly, finger- and toenail dysplasia, hypoplastic breasts and nipples, intensive freckling, lacrimal duct atresia, frontal alopecia, primary hypodontia, and loss of permanent teeth. ADULT differs significantly from EEC3 syndrome by the absence of facial clefting., disease: Defects in TP63 are the cause of ankyloblepharon-ectodermal defects-cleft lip/palate (AEC) [MIM:106260]. AEC is an autosomal dominant condition characterized by congenital ectodermal dysplasia with coarse, wiry, sparse hair, dystrophic nails, slight hypohidrosis, scalp infections, ankyloblepharon filiforme adnatum, maxillary hypoplasia, hypodontia and cleft lip/palate., disease: Defects in TP63 are the cause of ectrodactyly-ectodermal dysplasia-cleft lip/palate syndrome type 3 (EEC3) [MIM:604292]. EEC3 is an autosomal dominant syndrome characterized by ectrodactyly of hands and feet, ectodermal dysplasia and facial clefting., disease: Defects in TP63 are the cause of limb-mammary syndrome (LMS) [MIM:603543]. LMS is characterized by ectrodactyly, cleft palate and mammary-gland abnormalities., disease: Defects in TP63 are the cause of non-syndromic orofacial cleft type 8 (OFC8) [MIM:129400]. Non-syndromic orofacial cleft is a common birth defect consisting of cleft lips with or without cleft palate. Cleft lips are associated with cleft palate in two-

third of cases. A cleft lip can occur on one or both sides and range in severity from a simple notch in the upper lip to a complete opening in the lip extending into the floor of the nostril and involving the upper gum.,disease:Defects in TP63 are the cause of split-hand/foot malformation 4 (SHFM4) [MIM:605289]. Split-hand/split-foot malformation is a limb malformation involving the central rays of the autopod and presenting with syndactyly, median clefts of the hands and feet, and aplasia and/or hypoplasia of the phalanges, metacarpals, and metatarsals. There is restricted overlap between the mutational spectra of EEC3 and SHFM4.,domain:The transactivation inhibitory domain (TID) can interact with, and inhibit the activity of the N-terminal transcriptional activation domain of TA*-type isoforms.,function:Acts as a sequence specific DNA binding transcriptional activator or repressor. The isoforms contain a varying set of transactivation and auto-regulating transactivation inhibiting domains thus showing an isoform specific activity. May be required in conjunction with TP73/p73 for initiation of TP53/p53 dependent apoptosis in response to genotoxic insults and the presence of activated oncogenes. Involved in Notch signaling by probably inducing JAG1 and JAG2. Plays a role in the regulation of epithelial morphogenesis. The ratio of DeltaN-type and TA*-type isoforms may govern the maintenance of epithelial stem cell compartments and regulate the initiation of epithelial stratification from the undifferentiated embryonal ectoderm. Required for limb formation from the apical ectodermal ridge.,PTM:May be sumoylated.,similarity:Belongs to the p53 family.,similarity:Contains 1 SAM (sterile alpha motif) domain.,subunit:Binds DNA as a homotetramer. Isoform composition of the tetramer may determine transactivation activity. Isoforms Alpha and Gamma interact with HIPK2. Interacts with SSRP1, leading to stimulate coactivator activity.,tissue specificity:Widely expressed, notably in heart, kidney, placenta, prostate, skeletal muscle, testis and thymus, although the precise isoform varies according to tissue type. Progenitor cell layers of skin, breast, eye and prostate express high levels of DeltaN-type isoforms. Isoform 10 is predominantly expressed in skin squamous cell carcinomas, but not in normal skin tissues.,

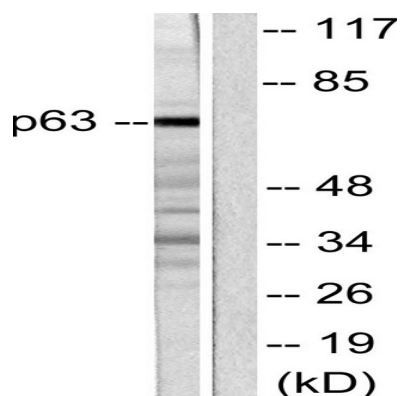
Research Area

Image Data



Immunofluorescence analysis of A549 cells, using p63 Antibody. The picture on the right is blocked with the synthesized peptide.

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Western blot analysis of lysates from COS7 cells, using p63 Antibody. The lane on the right is blocked with the synthesized peptide.

Note

For research use only.