10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TP73 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8881c

Product Information

Application	IHC-P, FC, IF, WB, E
Primary Accession	O15350
Other Accession	Q9JJP2
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	69623
Antigen Region	288-317

Additional Information

Gene ID	7161
Other Names	Tumor protein p73, p53-like transcription factor, p53-related protein, TP73, P73
Target/Specificity	This TP73 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 288-317 amino acids from the Central region of human TP73.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TP73 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TP73
Synonyms	P73

Function	Participates in the apoptotic response to DNA damage. Isoforms containing the transactivation domain are pro-apoptotic, isoforms lacking the domain are anti-apoptotic and block the function of p53 and transactivating p73 isoforms. May be a tumor suppressor protein. Is an activator of FOXJ1 expression (By similarity). It is an essential factor for the positive regulation of lung ciliated cell differentiation (PubMed:34077761).
Cellular Location	Nucleus. Cytoplasm. Note=Accumulates in the nucleus in response to DNA damage
Tissue Location	Expressed in striatal neurons of patients with Huntington disease (at protein level). Brain, kidney, placenta, colon, heart, liver, spleen, skeletal muscle, prostate, thymus and pancreas Highly expressed in fetal tissue. Expressed in the respiratory epithelium (PubMed:34077761).

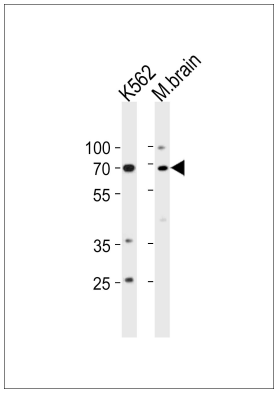
Background

TP73 is tumor protein p73, which is a member of the p53 family of transcription factors involved in cellular responses to stress and development. The family members include p53, p63, and p73 and have high sequence similarity to one another, which allows p63 and p73 to transactivate p53-responsive genes causing cell cycle arrest and apoptosis. The family members can interact with each other in many ways involving direct or indirect protein interactions, resulting in regulation of the same target gene promoters or regulation of each other's promoters. The p73 protein is expressed at very low levels in normal tissues and is differentially expressed in a number of tumors.

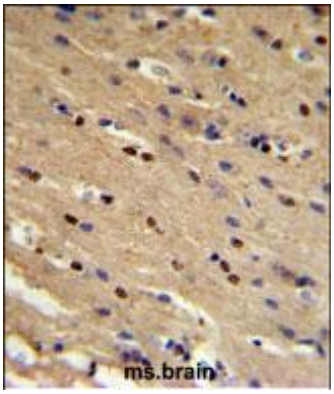
References

Mai,M., et.al., Genomics 51 (3), 359-363 (1998) Mai,M., et.al., Oncogene 17 (13), 1739-1741 (1998)

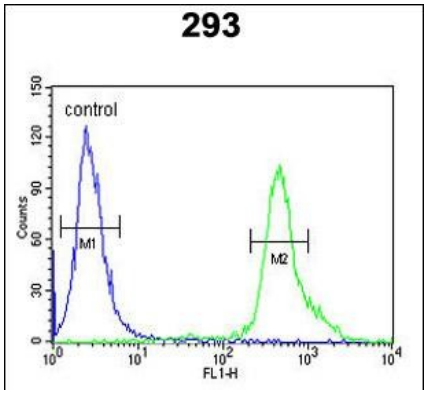
Images



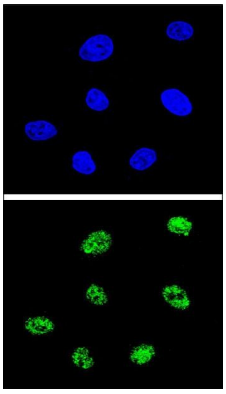
TP73 Antibody (Center) (Cat. #AP8881c) western blot analysis in K562 cell line and mouse brain tissue lysates (35ug/lane).This demonstrates the TP73 antibody detected the TP73 protein (arrow).



TP73 Antibody (Center) (Cat. #AP8881c) IHC analysis in formalin fixed and paraffin embedded mouse brain followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the TP73 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



TP73 Antibody (Center) (Cat. #AP8881c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of TP73 Antibody (Center) (Cat. #AP8881c) with 293 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).