

Product Specification Sheet

**p73α (p73 alpha) Antibody**

<b>Cat. P73A11-S</b>	Rabbit Anti-Human P73alpha Antiserum #1	<b>SIZE:</b> 100 ul
<b>Cat. P73A11-A</b>	Rabbit Anti-Human p73α Ig G # 1 (affinity pure)	<b>SIZE:</b> 100 ug
<b>Cat. P73A11-P</b>	Human p73α control/blocking peptide # 1	<b>SIZE:</b> 100 ug

Human **p73α** is the first known structural and functional homolog of one of the most studied tumor protein, p53 (1). Human p73 gene encodes two distinct polypeptides: The p73 long form (human 636 AA, termed p73α; mouse 690 aa) and the short form (499 AA; termed p73β). The short form arises through alternative splicing of the p73. With the exception of C-terminal 5 AA, p73β is identical to p73α. Both p73α and p73β transcripts were detected all human tissues. The endogenous p73α protein has also been detected in cell extracts of HT-29, IMR-32, and SK-N-SH cells. Other cell lines, SK-N-MC SK-N-AS displayed significantly reduced levels of p73α protein (1). The C-terminal domain (364-393) of p53 and p73 are quite distinct. p73 has been mapped to human chromosome 1p36, a region that is frequently deleted in a variety of human cancers including neuroblastoma, colon cancer, melanoma, and breast cancer.

**FUNCTION:** Participates in the apoptotic response to DNA damage. When overproduced, activates transcription from p53-responsive promoters and induces apoptosis. May be a tumor suppressor protein.

**SUBCELLULAR LOCATION:** Nucleus.

**SIMILARITY:** Belongs to the p53 family.

**Protein name** Tumor protein p73

**Synonyms** p53-like transcription factor  
p53-related protein

**Gene name** Name: TP73; Synonyms: P73

**Source of Antigen and Antibodies**

<b>Antigen</b>	20-aa peptide of Human p73α; protein accession #O15350, refs 1) ( <b>designated p73A11-P, control peptide</b> ).conjugated to KLH; Epitope location ~ C-terminus
<b>Ab Host/type</b>	Rabbit, polyclonal Aff pure IgG ( <b>cat #P7311-A</b> ) purified over the antigen column
<b>2-ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available)
<b>-ve control</b>	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Form & Storage of Antibodies/Peptide Control**

**Antiserum (unpurified)**

100ul solution lyophilized powder  
Supplied in Buffer: 0.05% azide  
**Reconstitute powder in 100 ul PBS**

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder in PBS at 1mg/ml**

**Control/blocking peptide**

100 ug/100 ul solution lyophilized powder  
Supplied in Buffer: PBS pH 7.5,  
**Reconstitute powder in PBS at 1 mg/ml.**

**Storage**

**Short-term:** unopened, undiluted liquid vials at 20°C and powder at 4°C or -20°C..

**Long-term:** at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder

**Recommended Usage**

**Western Blotting** (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique) (1).

**ELISA** (1:10K-1:100K; using 50-100 ng of control peptide/well).

**Histochemistry & Immunofluorescence:** Not tested. We recommend the use of affinity purified antibody at 2-20 ug/ml.

**Specificity & Cross-reactivity**

The 20 AA human p73α11 immunogenic peptide sequence has no significant homology with p53. It is conserved in monkey (100%), mouse (90%), and non-mammalian *Barbus barbus*.. Antibody crossreactivity in various species is not established. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity

**General References:** Kaghad, M et al (1997) Cell 90, 809-819; 2. Oren, M (1997) Cell 90, 829-832; Herranz M et al (1999) Cancer Res. 59, 2068-2071; Yang A et al (2000) Nature 404, 99-103.

\*This product is for in vitro research use only.

**Related material available from ADI**

Anti-p53, Phosphorylated, acetylated, p63, p73

**Western Blot recycling kit** (Use the same blot to probe with multiple antibodies p53, p63, p73, etc.) **recycle blot at room temp in 5-10 min;** No mercaptoethanol or heating required).

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