

p63alpha Ab

Cat.#: BF0563
Size: 50ul,100ul,200ul

Concn.: 1mg/ml
Source: Mouse

Mol.Wt.: 51kDa
Clonality: Monoclonal

Application: ELISA 1/10000, WB 1/500 - 1/2000, IHC 1/200 - 1/1000

Reactivity: Human, Mouse, Rat, Monkey

Purification: Affinity-chromatography.

Specificity: p63alpha Ab detects endogenous levels of total p63alpha.

Immunogen: Purified recombinant fragment of human p63alpha expressed in E. Coli.

Uniprot: Q9H3D4

Description: The p63 gene is a homologue of the p53 tumor suppressor gene. Like p53, p63 contains a transactivation (TA) domain induce the transcription of target genes, a DNA binding domain, and an oligomerization domain (OD), used to form tetramers. In contrast to p53, the p63 gene encodes for at least six major isoforms. Three isoforms (TAp63 α , TAp63 β , and TAp63 γ) contain the transactivating (TA) domain and are able to transactivate p53 report genes and induce apoptosis. In contrast, the other three isoforms (Δ Np63 α , Δ Np63 β , Δ Np63 γ) are transcribed from an internal promoter localized within intron3, lack the TA domain, and act as dominant-negatives to suppress transactivation by both p53 and TAp63 isoforms. p63 is highly expressed in the basal cells of the epithelium significant for proper limb outgrowth and morphogenesis.⁴ In differentiating tissues, p63 is crucial for maintaining the stem cell identity of the basal cells, and is indispensable for correct development of the skin as well as the limb. p63-deficient mice lack all squamous epithelia and their derivatives, including hair, whiskers, teeth, as well as mammary, lacrimal, and salivary glands. 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 Δ N-type isoforms. Isoform 10 is predominantly expressed in skin squamous cell carcinomas, but not in normal skin tissues.

Subcellular Location: Nucleus.

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Similarity:

The transactivation inhibitory domain (TID) can interact with, and inhibit the activity of the N-terminal transcriptional activation domain of TA*-type isoforms. Belongs to the p53 family.

Storage Condition and Buffer:

Mouse IgG1 in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.

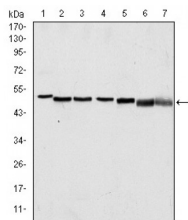
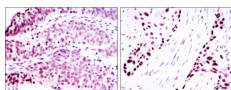


Figure 1: Western blot analysis using p63α mouse mAb against A431 (1), Hela (2), Jurkat (3), THP-1 (4), NIH/3T3 (5), Cos7 (6) and PC-12 (7) cell lysate.



Immunohistochemical analysis of paraffin-embedded ovarian cancer (left) and lung cancer (right) using p63 mouse mAb with DAB staining.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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