

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to p63 $\alpha$

Format: PURE      RUO      REF      IQP-1543P      Volume: 0.1ml



#### Description

<b>Clone</b>	4E5
<b>Isotype</b>	Mouse IgG1
<b>Specificity</b>	p63 $\alpha$
<b>Alternative names</b>	P51B; KET; p63 $\alpha$
<b>Species</b>	Human, Mouse, Rat & Monkey
<b>Immunogen</b>	Synthesized peptide of human p63 $\alpha$ .
<b>Mw</b>	51kDa
<b>Format</b>	Ascitic fluid containing 0.03% sodium azide.

#### Summary

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 $\alpha$ , TAp63 $\beta$ , and TAp63 $\gamma$ ) contain the transactivating (TA) domain and are able to transactivate p53 report genes and induce apoptosis. In contrast, the other three isoforms ( $\Delta$ Np63 $\alpha$ ,  $\Delta$ Np63 $\beta$ ,  $\Delta$ Np63 $\gamma$ ) 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.<sup>4</sup> 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 DeltaN-type isoforms. Isoform 10 is predominantly expressed in skin squamous cell carcinomas, but not in normal skin tissues.

**Applications** Western Blotting: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. ELISA: Propose dilution 1/10000. Not yet tested in other applications. Determining optimal working dilutions by titration test.

#### Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.



### Handling and Storage

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN<sub>3</sub>) or as ascetic fluid containing 0.03% sodiumazide. Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

### Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

### Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent. Representative flow cytometric data is included in this data sheet.

### Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

- References**
1. Cancer Res. 2008 Jul 1;68(13):5122-31.
  2. Eur J Med Genet. 2008 Sep-Oct;51(5):497-500.

### Explanation of used symbols



Consult instructions for use



Catalogue number



Sufficient for



Caution, consult accompanying document



Keep away from (sun)light



Biological risks



Temperature limitation (°C)



For Research Use Only



Batch code



Use by yyyy-mm-dd



Manufacturer



Authorized Representative in the European Community



Conformité Européenne (European Conformity)

		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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