

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to ERK2

Format: PURE      RUO      REF      IQP-1121P      Volume: 0.1ml



#### Description

<b>Clone</b>	5D4B1,5D4E3
<b>Isotype</b>	Mouse IgG2b
<b>Specificity</b>	ERK2
<b>Alternative names</b>	ER; ESR; Era; ESRA; NR3A1; DKFZp686N23123; ESR1
<b>Species</b>	Human
<b>Immunogen</b>	Purified recombinant fragment of ER expressed in E. Coli.
<b>Mw</b>	
<b>Format</b>	Ascitic fluid containing 0.03% sodium azide.

**Summary** ER (estrogen receptor 1) a member of the steroid receptor superfamily, contains highly conserved DNA binding (DBD) and ligand binding domains (LBD). Through its estrogen-independent and estrogen-dependent activation domains (AF-1 and AF-2, respectively), ER regulates transcription by recruiting coactivator proteins and interacting with general transcriptional machinery. Phosphorylation provides an important mechanism to regulate ER activity. ER is phosphorylated on multiple sites. Serines 104, 106, 118 and 167 are located in the amino-terminal transcription activation function domain AF-1, and phosphorylation of these serines plays an important role in regulating ER activity. Ser118 may be the substrate of the transcription regulatory kinase cdk7. Ser167 may be phosphorylated by p90RSK and Akt. Phosphorylation of Ser167 may confer tamoxifen resistance in breast cancer patients.

**Applications** Western Blotting: 1/500 - 1/2000. 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 ascectic 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. ampbell, R.A. et al. 2001, J. Biol. Chem. 276, 9817-9824.  
2. Chen, D. et al. 2000, Mol. Cell 6, 127-137.
- 

### Explanation of used symbols



REF

Consult instructions for use



Catalogue number



Sufficient for



Caution, consult accompanying document



Keep away from (sun)light



Biological risks



Temperature limitation (°C)

RUO

For Research Use Only

LOT

Batch code



Use by yyyy-mm-dd



Manufacturer

EC/REP

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

---



**IQ Products BV**

Rozenburglaan 13a  
9727 DL Groningen, The Netherlands

- +31 (0)50 57 57 000  
 +31 (0)50 57 57 002  
 Technical [marketing@iqproducts.nl](mailto:marketing@iqproducts.nl)  
 Orders [orders@iqproducts.nl](mailto:orders@iqproducts.nl)  
 [www.iqproducts.nl](http://www.iqproducts.nl)