

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to DDR1

Format: PURE RUO REF IQP-1204P Volume: 0.1ml

Description Ti

Clone 2G4E12 **Isotype** Mouse IgG1

DDR1 **Specificity**

Alternative names

CAK; DDR; NEP; PTK3; RTK6; TRKE; CD167

Species Human

Purified recombinant fragment of DDR1 (aa602-681) expressed in E. Coli. **Immunogen**

Format Ascitic fluid containing 0.03% sodium azide.

Summary

DDR1: discoidin domain receptor tyrosine kinase 1. Receptor tyrosine kinases (RTKs) play a key role in the communication of cells with their microenvironment. These molecules are involved in the regulation of cell growth, differentiation and metabolism. The protein encoded by this gene is a RTK that is widely expressed in normal and transformed epithelial cells and is activated by various types of collagen. This protein belongs to a subfamily of tyrosine kinase receptors with a homology region to the Dictyostelium discoideum protein discoidin I in their extracellular domain. Its autophosphorylation is achieved by all collagens so far tested (type I to type VI). In situ studies and Northern-blot analysis showed that expression of this encoded protein is restricted to epithelial cells, particularly in the kidney, lung, gastrointestinal tract, and brain. In addition, this protein is significantly over-expressed in several human tumors from breast, ovarian, esophageal, and pediatric brain. This gene is located on chromosome 6p21.3 in proximity to several HLA class I genes. Alternative splicing of this gene results in multiple transcript variants.

Applications Western Bloting: 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. IO 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.

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Handling and Storage

Antibodies are supplied in 0.01 M sodium phosphate, 0.15 M NaCl; pH 7.3, 0.03% sodiumazide (NaN3) 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. FASEB J. 2000 May;14(7):973-81.

- 2. Exp Eye Res. 2001 Jan;72(1):87-92.
- 3. Proc Natl Acad Sci U S A. 2002 Dec 24;99(26):16899-903.

Explanation of used symbols





Use by yyyy-mm-dd





fluorescence Manufacturer Authorized Representative in the European Community Conformité Européenne (European Conformity)

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



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