Anti-p53 / DIA-530
Mouse monoclonal anti-DNA-repair marker p53, Clone CC53

Product Information

Catalog No.:	**DIA-530-P1** (1000µl **DIA-530-P05** (500µl) DIA-530-M (100µl sample)
Clone:	CC53
Isotype:	Mouse IgG1
Specificity:	Human p53, wild type and mutated
Immunogen:	Recombinant, human wild type p53
Physical State:	Lyophilized powder
Species Reactivity:	Human
Positive Control:	Breast carcinoma, Colon carcinoma
Visualization:	Nuclear
Reconstitution:	DIA-530-P1 restore to 1000µl DIA-530-P05 restore to 500µl DIA-530-M restore to 100µl Reconstitute with sterile distilled water by gentle shaking for 10 minutes
Presentation:	Purified antibody in PBS with 2% BSA, 0.05% NaN3,
Application:	Immunohistochemistry (IHC) (standard formalin-fixed paraffin sections)
Dilution:	1:100-200 IHC (General recommendation, validation of antibody performance/protocol is the responsibility of the end user. Postive/negative controls should be run simultaneously with patient specimen. Interpretation must be made by a qualified pathologist within the context of patient's clinical history/other diagnostic tests.)

Reactivity

The p53 tumor suppressor gene has been found to contain mutations in over 50% of human cancers. Many mutations of the p53 gene have been associated with malignant transformation in a wide variety of human tumors. p53 immunostaining is of use in demonstrating accumulation of p53 protein, which occurs in a high frequency in a wide variety of transformed cells.
Anti-p53 Tumor Suppressor Protein antibody recognizes a 53 kDa phosphoprotein, identified as p53 suppressor gene product. It reacts with the mutant as well as wild form of p53. Positive nuclear staining with this antibody has been shown to be a negative prognostic factor in Breast carcinoma, Lung carcinoma, Colorectal, and Urothelial carcinoma. p53 positivity has also been used to differentiate Uterine serous carcinoma from endometrioid carcinoma as well as to detect Intratubular germ cell neoplasia. Moreover antibody clone CC53 helps to detect single invading astrocytoma-cells.

Instructions for Use

Immunohistochemical staining of standard formalin-fixed paraffin sections

Deparaffinize and rehydrate according to standard procedures. Heat induced epitope retrival (HIER) is required. For immunohistochemical detection different techniques can be used: indirect immunoenzyme labeling with a secondary antibody conjugate, biotin/(strept)avidin-based detection, soluble enzyme immune complex or polymer-based detection. The antibody can be adapted for use on automated staining instruments.

Storage and Stability

The antibody in lyophilised form is stable for at least one year (-20°C). As reconstituted liquid store at 2-8°C short term (several weeks). For long term storage aliquot and freeze at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Safety Notes

The material contains 0.05% sodium azide as preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material. Avoid skin and eye contact, inhalation, and ingestion.

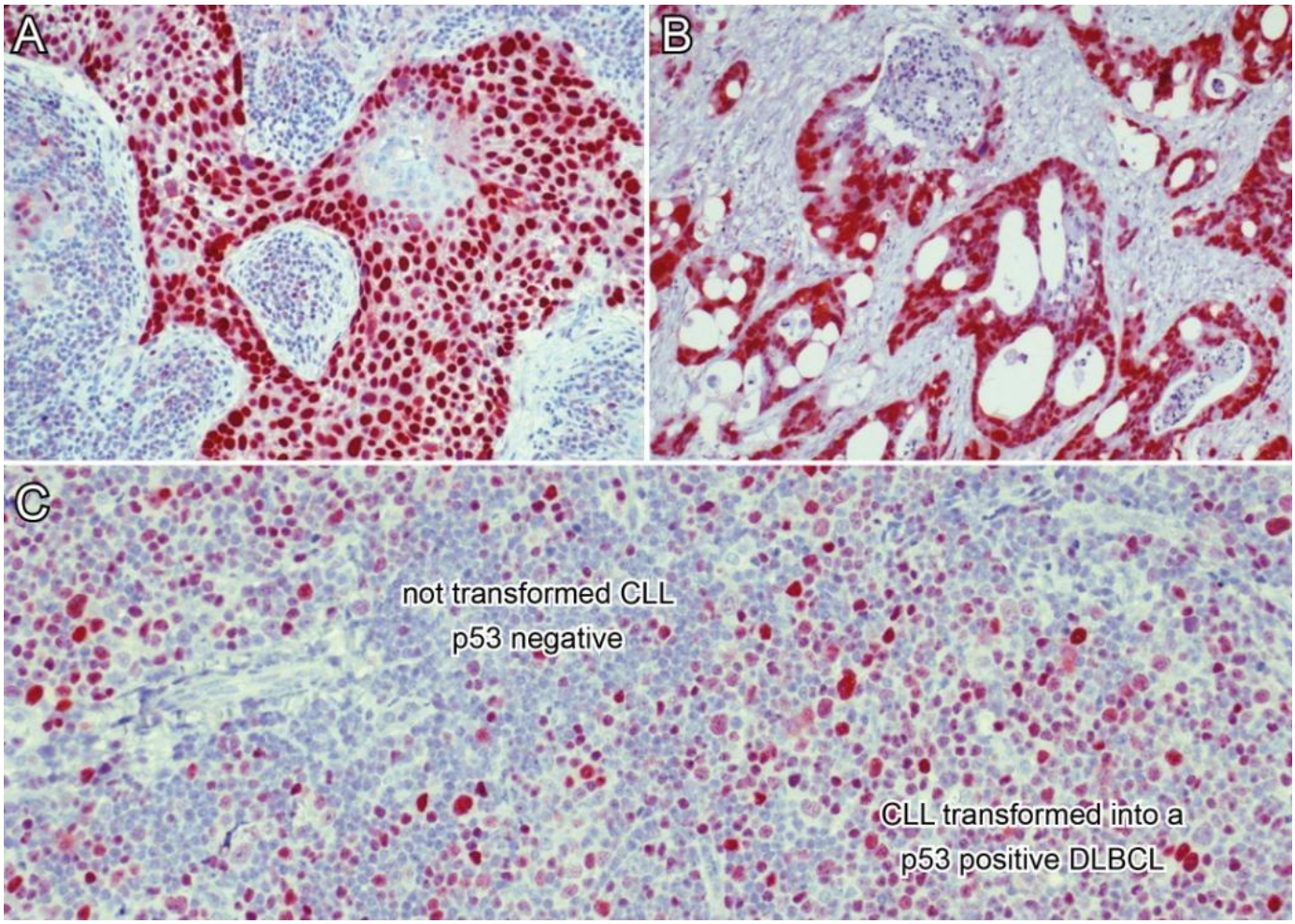
For research use only. Not for diagnostic or therapeutic use.

Dianova GmbH
Warburgstrasse 45
D-20354 Hamburg
Germany

URL: www.dianova.com
Email: info@dianova.com
Phone: +49 (0)40 – 45067 – 0
Fax +49 (0)40 – 45067 – 490

Figure

Different p53 immunostainings with antibody clone CC53 in FFPE tissue sections.
(pictures courtesy of Prof. Dr. med. Harald Stein, Pathodiagnostik Berlin, Berlin, Germany)



(A) Squamous cell carcinoma of the neck. Nearly all tumor cells are strongly p53 positive in their nuclei.
(B) Colon carcinoma. Nearly all tumor cells are strongly p53 positive in their nuclei.
(C) Chronic lymphocytic leukemia (CLL) transformed into a diffuse large B-cell lymphoma (DLBCL) = Richter syndrom. The non-transformed CLL area is p53 negative wheras most of the transformed DLBCL cells are strongly p53 positive.
(A-C) The p53 upregulation points to a loss of its tumor suppressor function which permits the survival of cells with oncogenic genetic alterations.

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