Anti–Human p53 Mouse Monoclonal Antibody

Clone: DO7 **REF** RU00003

Intended use

Anti-human p53 (Clone: DO7) Mouse Monoclonal Antibody is intended for research use only. Not for use in diagnostic procedures. Not for human or animal consumption.

Background

p53/TP53 is a tumor suppressor protein containing transcriptional activation, DNA binding, and oligomerization domains. It responds to diverse cellular stresses to regulate expression of target genes, thereby inducing cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. Mutations in the gene are associated with a variety of human cancers, including hereditary cancers such as Li-Fraumeni syndrome. Alternative splicing of this gene and the use of alternate promoters result in multiple transcript variants and isoforms. Additional isoforms have also been shown to result from the use of alternate translation initiation codons (PMIDs: 12032546, 20937277). [provided by RefSeq, Feb 2013].

Alternative names: Tumor protein p53 Li-Fraumeni syndrome; P53, TRP53 Antigen NY-CO-13; Phosphoprotein p53; Tumor suppressor p53

Reagent provided

Anti-human p53 (Clone: D07) Mouse Monoclonal Antibody is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG2b. The total protein concentration is 0.2 +/- 0.05 mg/mL.

For immunohistochemistry the antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissues, dependent upon the detection system used. These are guidelines only and optimal dilutions should be determined by the individual laboratory.

Immunogen

Recombinant human wild type p53 protein was expressed in *E. coli*.

Specificity

The specificity of the anti- human p53 (Clone: DO7) Mouse Monoclonal Primary Antibody was established on human colon tumor and negative human lung tissue. The anti-p53 presented no staining on formalin fixed normal lung tissue and positive staining on formalin fixed human colon tumor tissue using immunohistochemical (IHC) test methods.

Precautions

1. This product contains sodium azide (NaN_3), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN_3 may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
2. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
3. Unused reagents should be disposed of according to local, State, and Federal regulations.
4. Suitability for specific application may vary and it is the responsibility of the end user to determine the appropriate application for use and stability.

Storage

Store at 2-8°C. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user.