

## Anti-p53 Monoclonal Antibody (PAb122)

Catalog Number: M00001-4

### About Tp53

Anti-Glycogen Synthase 1 pS641 antibody is validated by IHC, Western Blot and ELISA. Human muscle glycogen synthase (GS) is responsible for the biosynthesis of glycogen from phosphorylated glucose units. Mammalian liver and muscle contain GS consisting of four subunits with a total molecular weight of 360,000. GS is subject to regulation through both allosteric and covalent modification and occurs in two forms: the phosphorylated inactive form, and the dephosphorylated active form. GS is inactivated by the serine/threonine kinase called glycogen synthase kinase-3 $\beta$  that mainly functions to phosphorylate muscle glycogen synthase. This antibody is specific for the phosphorylated form of GS at S641. Phosphorylation of GS at S641 has been associated with Antiphospholipid Antibody Syndrome.

### Overview

Product Name	Anti-p53 Monoclonal Antibody (PAb122)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-p53 Monoclonal Antibody (PAb122) (Catalog# M00001-4). Tested in Flow Cytometry, ICC, IHC, IP, WB application(s). This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IP, IHC, ICC, WB
Clonality	Monoclonal pAb122
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
Storage Instructions	Store at -20°C for long-term storage. Avoid freeze/thaw cycles.
Host	Mouse
Uniprot ID	P02340

### Technical Details

Immunogen	SV40 transformed 3T3 cells
Predicted Reactive Species	Bovine, Chicken
Cross Reactivity	Weakly cross-reacts with dog p53.
Isotype	IgG2b
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Protein G affinity purified.

**Suggested Dilutions**

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western Blot (1:250 colorimetric, 1:250 ECL). Detects a band of ~48/53kDa.

Immunohistochemistry (1:20 - 1:100)

Suggested dilutions/conditions may not be available for all applications.

Optimal conditions must be determined individually for each application.

## Anti-p53 Monoclonal Antibody (PAb122) (M00001-4) Images

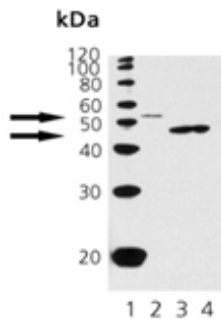


Figure 1. Western blot analysis of Tp53 using anti-Tp53 antibody (M00001-4).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Tp53 antigen affinity purified polyclonal antibody (Catalog # M00001-4) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-Mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # SA1021) with Tanon 5200 system. A specific band was detected for Tp53.

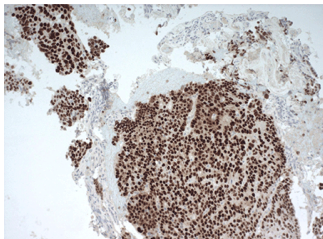


Figure 2. IHC analysis of Tp53 using anti-Tp53 antibody (M00001-4).

Tp53 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Tp53 Antibody (M00001-4) overnight at 4°C. Biotinylated goat anti Mouse IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

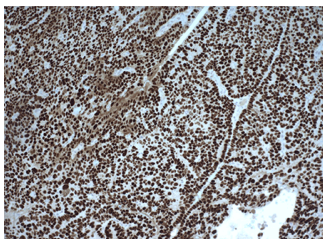


Figure 3. IHC analysis of Tp53 using anti-Tp53 antibody (M00001-4).

Tp53 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Tp53 Antibody (M00001-4) overnight at 4°C. Biotinylated goat anti Mouse IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

## 18 Publications Citing This Product

1. PubMed ID: 33335571, Han Y,Chen M,Wang H. Production of a SCID mouse model of medulloblastoma to explore the therapeutic value of targeting tumor driver genes.Exp Ther Med.2021 Feb;21(2):108.doi: 10.3892/etm.2020.9540.Epub 2020 Nov 27.PMID: 33335571;PMCID:PMC7739861.

2. PubMed ID: 25395712, Li W, Wu D, Wei B, Wang S, Sun H, Li X, Zhang F, Zhang C, Xin Y. Afr J Tradit Complement Altern Med. 2014 Aug 23;11(5):99-104. Ecollection 2014. Anti-Tumor Effect Of Cactus Polysaccharides On Lung Squamous Carcinoma Cells (Sk-Mes-1).

3. PubMed ID: 26137081, Lactotransferrin expression is downregulated and affects the mitogen-activated protein kinase pathway in gastric cancer

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