

**AM05278PU-N****Monoclonal Antibody to TP53I3 - Purified**

<b>Alternate names:</b>	PIG3, Quinone oxidoreductase PIG3, Tumor protein p53-inducible protein 3, p53-induced gene 3 protein
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	<p>P53 Inducible Gene-3 (PIG-3) may be a long-lived reporter, which may be useful for detecting transient activation of p53. The p53 tumor suppressor is the most commonly mutated gene in human cancers. The p53 protein, which is stabilized in response to different biological checkpoints, is activated by DNA damage, hypoxia, viral infection, or oncogene activation resulting in effects such as cell cycle arrest, apoptosis, senescence, differentiation, and antiangiogenesis. Other genes also implicated in the downstream effects as a result of p53 activation are: p21WAF1, GADD45, 14-3-3, bax, Fas/APO1, KILLER/ DR5, Tsp1, IGF-BP3 and others. The p53-inducible gene 3 (PIG3), was recently identified in a screen for genes induced by p53 before the onset of apoptosis. PIG3 shares significant homology with the oxidoreductases from several species. PIG3 protein is localized to the cytoplasm and induced in primary, non-transformed, and transformed cell cultures after exposure to genotoxic agents. The induction of PIG3 by p53 occurs with delayed kinetics as compared with other p53 downstream targets, such as p21 and MDM2. PIG3 levels are increased during p53-mediated growth arrest. Elevated levels of PIG3 are maintained in cells that resume cycling in the absence of ectopic p53 expression.</p>
<b>Uniprot ID:</b>	<a href="#">Q53FA7</a>
<b>NCBI:</b>	<a href="#">NP_001193731.1</a>
<b>GeneID:</b>	<a href="#">9540</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	10A2
<b>Immunogen:</b>	Hybridoma produced by the fusion of splenocytes from mice immunized with recombinant Human PIG-3 protein. <b>Genename:</b> TP53I3
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Protein A/G Chromatography <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.08% Sodium Azide
<b>Applications:</b>	<b>Western Blot</b> (5-10 µg/ml). <i>Positive Control:</i> Jurkat cell lysate. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** Recognizes PIG3 (p53 inducible gene 3).  
**Species:** Human.  
Other species not tested.
- Storage:** Upon receipt, store undiluted (in aliquots) at -20°C.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.
- Product Citations:** **Originator or purchased from resellers:**  
1. Marusyk A, Wheeler LJ, Mathews CK, DeGregori J. p53 mediates senescence-like arrest induced by chronic replicational stress. *Mol Cell Biol.* 2007 Aug;27(15):5336-51. Epub 2007 May 21. PubMed PMID: 17515610.
- General Readings:**  
1. Flatt PM, Polyak K, Tang LJ, Scatena CD, Westfall MD, Rubinstein LA, et al. p53-dependent expression of PIG3 during proliferation, genotoxic stress, and reversible growth arrest. *Cancer Lett.* 2000 Aug 1;156(1):63-72. PubMed PMID: 10840161.  
2. Venot C, Maratrat M, Dureuil C, Conseiller E, Bracco L, Debussche L. The requirement for the p53 proline-rich functional domain for mediation of apoptosis is correlated with specific PIG3 gene transactivation and with transcriptional repression. *EMBO J.* 1998 Aug 17;17(16):4668-79. PubMed PMID: 9707426.  
3. El-Deiry, W.S., Regulation of p53 downstream genes. *Semin. Cancer Biol.* 1998, 8, 345-357.

**Pictures:**

**Figure 1.** Western blot analysis using AM05278PU-N PIG-3 antibody on Jurkat lysate at 10 µg/ml.

