

Code No. 10371

## Anti-Human NP95 (mt40) Mouse IgG MoAb

Volume : 100 µg

Introduction	:	Np95 has been originally found as a tumor-specific nuclear antigen of 95kDa in mice. Experiments using B10 strains showed that Np95 is enriched in precancerous cells and is abnormally expressed throughout cell cycle in radiation-induced lymphomatoid cells. Recent attention is put on the epigenetic role of Np95, which mediates the interplay between DNA methylase and hemi-methylated sites to maintain DNA methylation patterns at replication forks. This antibody is available for detection of the human nucleoprotein NP95 (also known as UHRF1), whose function is dependent on S-phase in non-neoplastic cells but could be modified with abberant cell cycle during tumorigenesis.
Antigen	:	Purified human NP95 protein
Source	:	Mouse-Mouse hybridoma (SP210 × BALB/c mouse spleen cells, ascites)
Clone	:	mt40 Subclass : IgG <sub>1</sub>
Purification	:	Affinity purified with Protein A
Form	:	Lyophilized product from 1 $$ % BSA in PBS containing 0.05 % NaN_3 $$
How to use	:	1.0 mL deionized water will be added to the product, then its concentration comes to 100 $\mu\text{g/mL}$
Stability		Lyophilized product, 5 years at 2 - 8 °C Solution, 2 years at –20 °C
Application	:	This antibody can be used for western blotting in concentration of 1 - 10 $\mu\text{g/mL}$
Reference	:	<ol> <li>Sharif J, Muto M, Takebayashi S, Suetake I, Iwamatsu A, Endo TA, Shinga J, Mizutani-Koseki Y, Toyoda T, Okamura K, Tajima S, Mitsuya K, Okano M, Koseki H. The SRA protein Np95 mediates epigenetic inheritance by recruiting Dnmt1 to methylated DNA. Nature. 2007 Dec 6;450(7171):908-12.</li> <li>Muto M, Fujimori A, Nenoi M, Daino K, Matsuda Y, Kuroiwa A, Kubo E, Kanari Y, Utsuno M, Tsuji H, Ukai H, Mita K, Takahagi M, Tatsumi K. Isolation and Characterization of a Novel Human Radiosusceptibility Gene, NP95. Radiat Res. 2006 Nov;166(5):723-33.</li> <li>Muto M, Kanari Y, Kubo E, Takabe T, Kurihara T, Fujimori A, Tatsumi K. Targeted disruption of Np95 gene renders murine embryonic stem cells hypersensitive to DNA damaging agents and DNA replication blocks. J Biol Chem. 2002 Sep 13;277(37):34549-55.</li> <li>Bonapace IM, Latella L, Papait R, Nicassio F, Sacco A, Muto M, Crescenzi M, Di Fiore PP. Np95 is regulated by E1A during mitotic reactivation of terminally differentiated cells and is essential for S phase entry. J Cell Biol. 2002 Jun 10;157(6):909-14.</li> <li>Miura M, Watanabe H, Sasaki T, Tatsumi K, Muto M. Dynamic changes in subnuclear NP95 location during the cell cycle and its spatial relationship with DNA replication foci. Exp Cell Res. 2001 Feb 15;263(2):202-8.</li> <li>Uemura T, Kubo E, Kanari Y, Ikemura T, Tatsumi K, Muto M. Temporal and spatial localization of novel nuclear protein NP95 in mitotic and meiotic cells. Cell Struct Funct. 2000 Jun;25(3):149-59.</li> <li>Fujimori A, Matsuda Y, Takemoto Y, Hashimoto Y, Kubo E, Araki R, Fukumura R, Mita K, Tatsumi K, Muto M. Cloning and mapping of Np95 gene which encodes a novel nuclear protein associated with cell proliferation. Mamm Genome. 1998 Dec;9(12):1032-5.</li> </ol>