PRODUCT DATA SHEET

SirT2 mouse mAb

Catalog No.	IMB0138
Reactivity	Human;Mouse;Rat
Applications	WB; IF/ICC
Gene Name	sirt2
Protein Name	-
Human Gene Id	22933
Swiss-Prot	Q8IXJ6
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Dilution	WB: 1:1000
PurIF:ication	The antibody was affinity-purIF:ied from mouse ascites by affinity-chromatography using epitope-specIF:ic immunogen.
Concentration	1 mg/ml
Storage&Stability	-20°C/1 year
Background	This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Several transcript variants are resulted from alternative splicing of this gene. [provided by RefSeq, Jul 2010],
Subcellular Location.	Nucleus. Cytoplasm, perinuclear region. Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cytoplasm, cytoskeleton, spindle. Midbody. Chromosome. Perikaryon. Cell projection. Cell projection, growth cone. Myelin membrane. Localizes in the cytoplasm during most of the cell cycle except in the G2/M transition and during mitosis, where it is localized in association with chromatin and induces deacetylation of histone at 'Lys-16' (H4K16ac) (PubMed:17726514, PubMed:23468428). Colocalizes with KMT5A at mitotic foci (PubMed:23468428). Colocalizes with CDK1 at centrosome during prophase and splindle fibers during metaphase (PubMed:17488717). Colocalizes with Aurora kinase AURKA at centrosome during early prophase and in the centrioles and growing mitotic spindle throughout metaphase (PubMed:17488717). Colocalizes with Aurora kinase AURKB during cytokinesis with the midbody (PubMed:17488717). Colocalizes with microtubules (PubMed:12620231). Detected in perinuclear

	foci that may be aggresomes containing misfolded, ubiquitinated proteins (By similarity). Shuttles between the cytoplasm and the nucleus through the CRM1 export pathway (PubMed:17726514). Colocalizes with EP300 in the nucleus (PubMed:24177535). Translocates to the nucleus and chromatin upon bacterium Listeria monocytogenes infection in interphase cells (PubMed:23908241). Deacetylates FOXO3 in the cytoplasm (By similarity). Colocalizes with PLP1 in internodal regions, at paranodal axoglial junction and Schmidt-Lanterman incisures of myelin sheat (By similarity). Colocalizes with CDK5R1 in the perikaryon, neurites and growth cone of hippocampal neurons (By similarity). Colocalizes with alpha-tubulin in neuronal growth cone (By similarity). Localizes in the cytoplasm and nucleus of germinal vesicle (GV) stage oocytes (By similarity). Colocalizes with alpha-tubulin on the meiotic spindle as the oocytes enter into metaphase, and also during meiotic anaphase and telophase, especially with the midbody (By similarity). Colocalizes with PARD3 in internodal region of axons (By similarity). Colocalizes with acetylated alpha-tubulin in cell projection processes during primary oligodendrocyte precursor (OLP) dIF:ferentiation (By similarity). [Isoform 1]: Cytoplasm. Nucleus. Predominantly localized in the cytoplasmic. [Isoform 2]: Cytoplasm. Nucleus. Predominantly localized in the cytoplasmic. [Isoform 5]: Cytoplasm. Nucleus. Predominantly localized in the nucleus.
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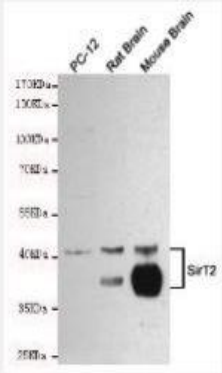
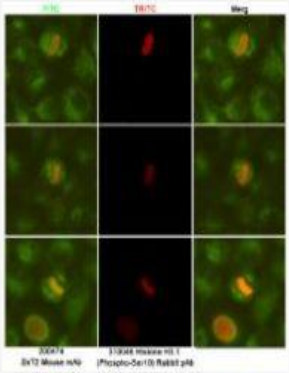
Products Images:



Western blot detection of SirT2 in PC-12, Rat Brain and Mouse Brain cell lysates using SirT2 mouse mAb (1:1000 diluted). Predicted band size: 39,43KDa. Observed band size:39,43KDa.



Immunofluorescent analysis of Hela cells fixed fixed by anhydrous methanol at -20℃ and using SirT2 (200474,dilution 1:50) mouse mAb (green) and Histone H3.1 (Phospho-Ser10) (310045,dilution 1:200) Rabbit pAb (red).