

## Monoclonal Antibody to Human Pds1

<b>Catalog No.:</b>	DM3171
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.2 mg/ml
<b>Host / Isotype:</b>	Mouse / IgG2a
<b>Recommended Isotype Controls:</b>	AM03096PU-N
<b>Clone:</b>	DCS-280
<b>Immunogen:</b>	Human recombinant full length Pds1 protein.
<b>Applications:</b>	Western Blotting (Not verified). Immunohistology (formalin/paraffin): Ab 1-2 micrograms/ml for 30 min at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min. Recommended positive control: HeLa Cells, Tonsil. Other applications not tested. Optimal dilutions of this antibody are dependent on conditions and should be determined by the user. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Pds1 is an anaphase inhibitor and plays important role in DNA damage and spindle check point pathways. Pds1 inhibits sister chromatid separation by binding and inhibiting Esp1, cystein protease that causes cleavage of the cohesion Scc1 that binds the sister chromatids together. Pds1 is responsible for targeting of Esp1 to nucleus and its binding to the spindle. Degradation of Pds1 occurs shortly before anaphase, which liberates Esp1 and is a prerequisite for anaphase entry. Pds1 is targeted for degradation by ubiquitination mediated by cyclosome/anaphase-promoting complex (APC) functioning as a ubiquitin ligase. In response to DNA damage Chk1 phosphorylates Pds1 to stabilize it against the APC mediated destruction, hence preventing the entry of such a cell into anaphase. Cellular Localization: nuclear.  Mol. Wt of Antigen: 42kD
<b>Storage:</b>	Store the antibody at 4°C. Do not freeze! Shelf life: one year from despatch.
<b>General Readings:</b>	1. Wang H, et al. (2001) Gen