

C12orf32 (1101) Mouse Monoclonal antibody

C12orf32 (11O1) Mouse Monoclonal antibody Catalog # AP93893

Specification

C12orf32 (1101) Mouse Monoclonal antibody - Product Information

Application Primary Accession Reactivity Clonality Calculated MW WB <u>O9BSD3</u> Human Monoclonal 26709

C12orf32 (1101) Mouse Monoclonal antibody - Additional Information

Gene ID 83695

Other Names RAD9, HUS1, RAD1-interacting nuclear orphan protein 1, RAD9, RAD1, HUS1-interacting nuclear orphan protein, RHNO1 (HGNC:28206)

Storage Conditions -20°C

C12orf32 (1101) Mouse Monoclonal antibody - Protein Information

Name RHNO1 (HGNC:28206)

Function

Involved in microhomology-mediated end-joining (MMEJ) DNA repair by promoting recruitment of polymerase theta (POLQ) to DNA damage sites during mitosis (PubMed:37440612). MMEJ is an alternative non-homologous end-joining (NHEJ) machinery that takes place during mitosis to repair double-strand breaks in DNA that originate in S-phase (PubMed:37440612). Accumulates in M-phase; following phosphorylation by PLK1, interacts with POLQ, enabling its recruitment to double-strand breaks for subsequent repair (PubMed:37440612). Also involved in the DNA damage response (DDR) signaling in response to genotoxic stresses such as ionizing radiation (IR) during the S phase (PubMed:21659603, PubMed:25602520). Recruited to sites of DNA damage through interaction with the 9-1-1 cell-cycle checkpoint response complex and TOPBP1 in a ATR-dependent manner (PubMed:21659603, PubMed:

href="http://www.uniprot.org/citations/21659603" target="_blank">21659603). Plays a role



in the stimulation of CHEK1 phosphorylation (PubMed:21659603).

Cellular Location

Nucleus. Chromosome Note=Localizes to sites of DNA damage in a H2AX-independent manner

Tissue Location

Weakly expressed in testis, prostate, ovary, thymus and small intestine (PubMed:20811708). Expressed strongly in breast cancer cells (PubMed:20811708).

C12orf32 (1101) Mouse Monoclonal antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

C12orf32 (1101) Mouse Monoclonal antibody - Images



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY C12orf32 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-C12orf32 (Cat# AP93893)(1:500). Positive lysates (100ug) and (20ug) can be purchased separately from biodragon.