

ECAT1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP11238a**Specification**

ECAT1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession [Q587J8](#)
Other Accession [NP_001017361](#)

ECAT1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 154288

Other Names

KHDC3-like protein, ES cell-associated transcript 1 protein, KHDC3L, C6orf221, ECAT1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ECAT1 Antibody (N-term) Blocking peptide - Protein Information

Name KHDC3L

Function

As part of the OOEP-KHDC3 scaffold, recruits BLM and TRIM25 to DNA replication forks, thereby promoting the ubiquitination of BLM by TRIM25, enhancing BLM retainment at replication forks and therefore promoting stalled replication fork restart (By similarity). Regulates homologous recombination-mediated DNA repair via recruitment of RAD51 to sites of DNA double-strand breaks, and sustainment of PARP1 activity, which in turn modulates downstream ATM or ATR activation (PubMed: <http://www.uniprot.org/citations/31609975> target="_blank">31609975). Activation of ATM or ATR in response to DNA double-strand breaks may be cell-type specific (By similarity). Its role in DNA double-strand break repair is independent of its role in restarting stalled replication forks (By similarity). As a member of the subcortical maternal complex (SCMC), plays an essential role for zygotes to progress beyond the first embryonic cell divisions via regulation of actin dynamics (By similarity). Required for maintenance of euploidy during cleavage-stage embryogenesis (By similarity). Required for the formation of F-actin cytoplasmic lattices in oocytes which in turn are responsible for symmetric division of zygotes via the regulation of mitotic spindle formation and positioning (By similarity). Ensures proper spindle assembly by regulating the localization of AURKA via RHOA signaling and of PLK1 via a RHOA-independent process (By similarity). Required for the localization of MAD2L1 to kinetochores to enable spindle assembly checkpoint function (By similarity). Promotes neural

stem cell neurogenesis and neuronal differentiation in the hippocampus (By similarity). May regulate normal development of learning, memory and anxiety (By similarity). Capable of binding RNA (By similarity).

Cellular Location

Cytoplasm, cell cortex. Nucleus. Mitochondrion {ECO:0000250|UniProtKB:Q9CWU5}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q9CWU5} Chromosome. Note=Localized to centrosomes during interphase and mitosis (By similarity). Localizes to sites of DNA double-strand break repair (PubMed:31609975) {ECO:0000250|UniProtKB:Q9CWU5, ECO:0000269|PubMed:31609975}

Tissue Location

Expression appears to be maximal in germinal vesicle oocytes, it tails off through metaphase II oocytes and is undetectable following the completion of the oocyte to embryo transition.

ECAT1 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ECAT1 Antibody (N-term) Blocking peptide - Images**ECAT1 Antibody (N-term) Blocking peptide - References**

Pierre, A., et al. Genomics 90(5):583-594(2007) Mitsui, K., et al. Cell 113(5):631-642(2003)