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HUS1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP16922b

Specification

HUS1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O60921

HUS1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3364

Other Names
Checkpoint protein HUS1, hHUS1, HUS1

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.

HUS1 Antibody (C-term) Blocking Peptide - Protein Information

Name HUS1

Function
Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair (PubMed:21659603). The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex (PubMed:21659603). Acts then as a sliding clamp platform on DNA for several proteins involved in long- patch base excision repair (LP-BER) (PubMed:21659603). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates (PubMed:21659603). The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase (PubMed:21659603).

Cellular Location
Nucleus. Cytoplasm, cytosol. Note=In discrete nuclear foci upon DNA damage

(PubMed:11077446). According to PubMed:11077446, localized also in the cytoplasm (PubMed:11077446). DNA damage induces its nuclear translocation (PubMed:11077446). Shuttles between the nucleus and the cytoplasm (PubMed:11077446).

Tissue Location
Ubiquitous..

HUS1 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

HUS1 Antibody (C-term) Blocking Peptide - Images

HUS1 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene is a component of anevolutionarily conserved, genotoxin-activated checkpoint complexthat is involved in the cell cycle arrest in response to DNAdamage. This protein forms a heterotrimeric complex with checkpointproteins RAD9 and RAD1. In response to DNA damage, the trimericcomplex interacts with another protein complex consisting ofcheckpoint protein RAD17 and four small subunits of the replicationfactor C (RFC), which loads the combined complex onto thechromatin. The DNA damage induced chromatin binding has been shownto depend on the activation of the checkpoint kinase ATM, and isthought to be an early checkpoint signaling event. [provided byRefSeq].

HUS1 Antibody (C-term) Blocking Peptide - References

Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)Takeishi, Y., et al. Genes Cells 15(7):761-771(2010)Bai, H., et al. DNA Repair (Amst.) 9(5):478-487(2010)Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)Hosgood, H.D. III, et al. Respir Med 103(12):1866-1870(2009)