

FBXO18 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP11216b**Specification**

FBXO18 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q8NFZ0](#)**FBXO18 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 84893**Other Names**

F-box only protein 18, F-box DNA helicase 1, FBXO18, FBH1, FBX18

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.

FBXO18 Antibody (C-term) Blocking peptide - Protein Information**Name** FBH1 ([HGNC:13620](#))**Synonyms** FBX18, FBXO18**Function**

3'-5' DNA helicase and substrate-recognition component of the SCF(FBH1) E3 ubiquitin ligase complex that plays a key role in response to stalled/damaged replication forks (PubMed:11956208, PubMed:23393192). Involved in genome maintenance by acting as an anti-recombinogenic helicase and preventing extensive strand exchange during homologous recombination: promotes RAD51 filament dissolution from stalled forks, thereby inhibiting homologous recombination and preventing excessive recombination (PubMed:17724085, PubMed:19736316). Also promotes cell death and DNA double-strand breakage in response to replication stress: together with MUS81, promotes the endonucleolytic DNA cleavage following prolonged replication stress via its helicase activity, possibly to eliminate cells with excessive replication stress (PubMed:23319600, PubMed:23361013). Plays a major role in remodeling of stalled DNA forks by catalyzing fork regression, in which the fork reverses and the two nascent DNA strands anneal

(PubMed:25772361). In addition to the helicase activity, also acts as the substrate- recognition component of the SCF(FBH1) E3 ubiquitin ligase complex, a complex that mediates ubiquitination of RAD51, leading to regulate RAD51 subcellular location (PubMed:25585578).

Cellular Location

Nucleus. Chromosome Note=Accumulates at sites of DNA damage or replication stress (PubMed:19736316, PubMed:23677613). PCNA is required for localization to DNA damage sites (PubMed:23677613). Localizes to the nucleoplasm in absence of DNA damage (PubMed:23677613).

FBXO18 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

FBXO18 Antibody (C-term) Blocking peptide - Images

FBXO18 Antibody (C-term) Blocking peptide - Background

This gene encodes a member of the F-box protein family, members of which are characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into three classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbx class. It contains an F-box motif and seven conserved helicase motifs, and has both DNA-dependent ATPase and DNA unwinding activities. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene.

FBXO18 Antibody (C-term) Blocking peptide - References

Turnbull, C., et al. Nat. Genet. 42(6):504-507(2010) Fugger, K., et al. J. Cell Biol. 186(5):655-663(2009) Chiolo, I., et al. Mol. Cell. Biol. 27(21):7439-7450(2007) Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006) Deloukas, P., et al. Nature 429(6990):375-381(2004)