

# Summary

Production Name	Timeless (9L9) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
Purification	Affinity purification

#### Immunogen

Gene Name	TIMELESS {ECO:0000312 EMBL:AAH50557.1}
Alternative Names	hTIM; TIM; TIM1; Timeless; timeless circadian clock 1; TIMELESS1;
Gene ID	8914.0
SwissProt ID	Q9UNS1.A synthetic peptide of human Timeless

### Application

Dilution Ratio	WB: 1:5000-1:10000
Molecular Weight	139kDa

# Background

# Product Name: Timeless (9L9) Rabbit Monoclonal Antibody Catalog #: AMRe18947



Required for normal progression of S-phase. Involved in the circadian rhythm autoregulatory loop. Negatively regulates CLOCK-NPAS2/BMAL1-induced transactivation of PER1 possibly via translocation of PER1 into the nucleus. Plays an important role in the control of DNA replication, maintenance of replication fork stability, maintenance of genome stability throughout normal DNA replication, DNA repair and in the regulation of the circadian clock (PubMed:<a href="http://www.uniprot.org/citations/9856465" target=" blank">9856465</a>, PubMed:<a href="http://www.uniprot.org/citations/17141802" target=" blank">17141802</a>, PubMed:<a href="http://www.uniprot.org/citations/17296725" target=" blank">17296725</a>, PubMed:<a href="http://www.uniprot.org/citations/23418588" target=" blank">23418588</a>, PubMed: <a href="http://www.uniprot.org/citations/26344098" target=" blank">26344098</a>). Required to stabilize replication forks during DNA replication by forming a complex with TIPIN: this complex regulates DNA replication processes under both normal and stress conditions, stabilizes replication forks and influences both CHEK1 phosphorylation and the intra-S phase checkpoint in response to genotoxic stress (PubMed: <a href="http://www.uniprot.org/citations/17141802" target=" blank">17141802</a>, PubMed:<a href="http://www.uniprot.org/citations/17296725" target=" blank">17296725</a>). TIMELESS promotes TIPIN nuclear localization (PubMed:<a href="http://www.uniprot.org/citations/17141802" target=" blank">17141802</a>, PubMed:<a href="http://www.uniprot.org/citations/17296725" target=" blank">17296725</a>). Involved in cell survival after DNA damage or replication stress by promoting DNA repair (PubMed: <a href="http://www.uniprot.org/citations/17141802" target=" blank">17141802</a>, PubMed:<a href="http://www.uniprot.org/citations/17296725" target=" blank">17296725</a>, PubMed:<a href="http://www.uniprot.org/citations/26344098" target=" blank">26344098</a>, PubMed:<a href="http://www.uniprot.org/citations/30356214" target=" blank">30356214</a>). In response to double-strand breaks (DSBs), accumulates at DNA damage sites and promotes homologous recombination repair via its interaction with PARP1 (PubMed:<a href="http://www.uniprot.org/citations/26344098" target=" blank">26344098</a>, PubMed:<a href="http://www.uniprot.org/citations/30356214" target=" blank">30356214</a>). May be specifically required for the ATR-CHEK1 pathway in the replication checkpoint induced by hydroxyurea or ultraviolet light (PubMed:<a href="http://www.uniprot.org/citations/15798197" target=" blank">15798197</a>). Involved in the determination of period length and in the DNA damage-dependent phase advancing of the circadian clock (PubMed:<a href="http://www.uniprot.org/citations/23418588" target=" blank">23418588</a>). Negatively regulates CLOCK|NPAS2-ARTNL/BMAL1|ARTNL2/BMAL2-induced transactivation of PER1 possibly via translocation of PER1 into the nucleus (PubMed: <a href="http://www.uniprot.org/citations/9856465" target=" blank">9856465</a>). May also play an important role in epithelial cell morphogenesis and formation of branching tubules (By similarity).

## **Research Area**





Western blot detection of Timeless in MCF7, Hela cell lysates using Timeless antibody(1:1000 diluted).

#### Note

For research use only.