

Product Name: KD-Validated Timeless Circadian Regulator Recombinant Rabbit Monoclonal Antibody

Catalog #: KVAAb00834

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 138.7kDa

Antigen Information

Gene Name	TIMELESS TIMELESS; Timeless Circadian Regulator; HTIM; TIM1; TIM; Timeless Circadian Clock 1;
Alternative Names	Protein Timeless Homolog; Timeless (Drosophila) Homolog; Timeless Homolog (Drosophila); Tof1 Homolog (S. Cerevisiae); Timeless Homolog; Tof1 Homolog; TIMELESS1; FASPS4
Gene ID	8914.0
SwissProt ID	Q9UNS1
Immunogen	A synthesized peptide derived from human Timeless

Background

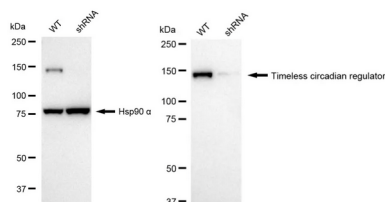
The protein encoded by this gene is highly conserved and is involved in cell survival after damage or stress, increase in DNA

polymerase epsilon activity, maintenance of telomere length, and epithelial cell morphogenesis. The encoded protein also plays a role in the circadian rhythm autoregulatory loop, interacting with the PERIOD genes (PER1, PER2, and PER3) and others to downregulate activation of PER1 by CLOCK/ARNTL. Changes in this gene or its expression may promote prostate cancer, lung cancer, breast cancer, and mental disorders. [provided by RefSeq, Feb 2014]

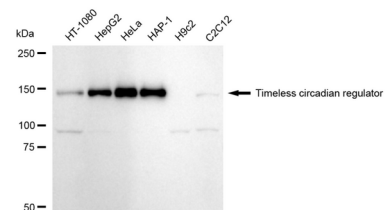
Research Area

Epigenetics and Nuclear Signaling,

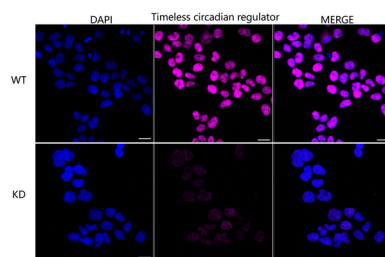
Image Data



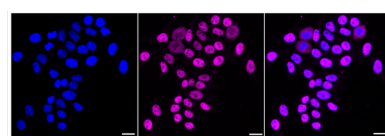
Western blotting analysis using timeless circadian regulator antibody (KVA00834). Timeless circadian regulator expression in wild-type (WT) and timeless circadian regulator (TIMELESS) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with timeless circadian regulator antibody (KVA00834, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



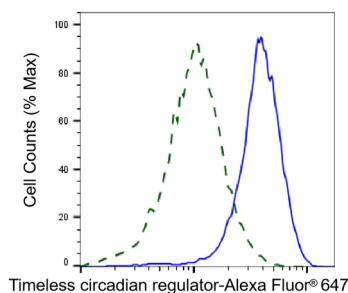
Western blotting analysis using Timeless circadian regulator antibody (KVA00834). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Timeless circadian regulator antibody (KVA00834, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



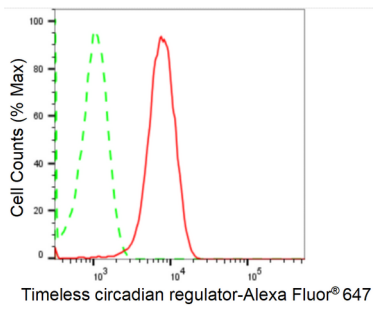
Immunocytochemical staining of HeLa cells using Timeless circadian regulator antibody (KVA00834, 1:1,000). Top panel: wild-type (WT); Bottom panel: Timeless circadian regulator shRNA knockdown (KD). Nuclei were stained blue with DAPI; Timeless circadian regulator was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HepG2 cells with Timeless circadian regulator antibody (KVA00834, 1:1,000). Nuclei were stained blue with DAPI; Timeless circadian regulator was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of Timeless circadian regulator knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with Timeless circadian regulator antibody (KVA00834, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Timeless circadian regulator expression in HepG2 cells using Timeless circadian regulator antibody (KVA00834, 1:2,000). Green, isotype control; red, Timeless circadian regulator.