

## **TWINKLE | Validation File**

**TARGET** Twinkle mtDNA helicase

**CLONE NAME** CELI38A

**DESCRIPTION** Rat monoclonal

**ANTIGEN USED** human TWINKLE-GFP-HIS-FLAG full length protein

**ISOTYPE** IgG2a, k

**SPECIES REACTIVITY** human

**LOCALIZATION** mitochondrion nucleoid

**POSITIVE CONTROL** tonsil

**STORAGE BUFFER** Tissue culture supernatant: 0.02% sodium azide

**STORAGE** Aliquot and store at 4C. Do not freeze



Recommended



Inconclusive



Not Recommended



Not Tested

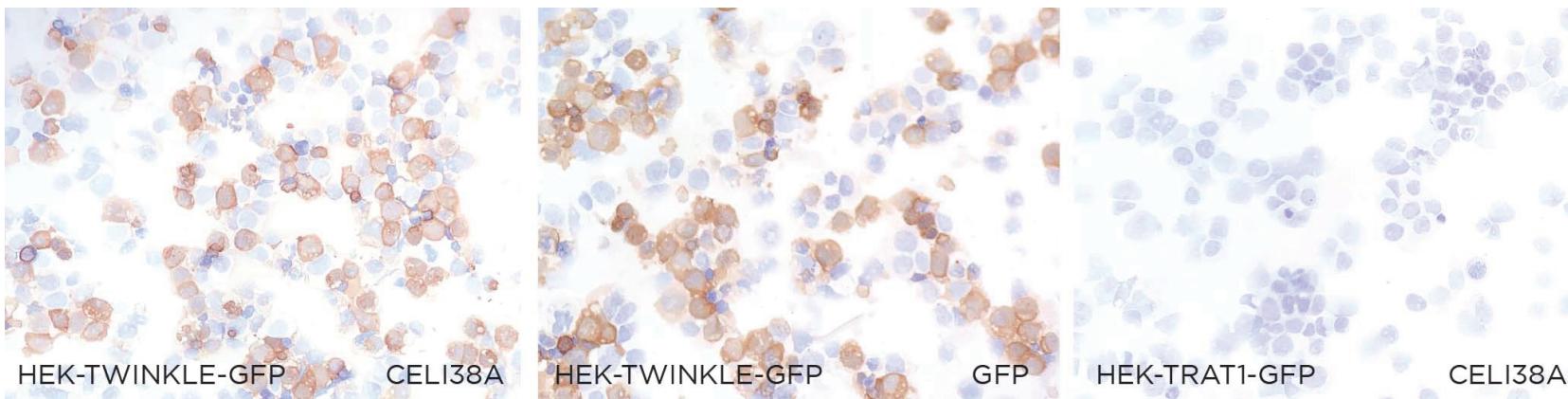
## APPLICATIONS

### ICC | *Immunocytochemistry*

CELI38A mAb is able to detect human TWINKLE protein in immunocytochemistry

**DILUTION** neat supernatant

To confirm that CELI38A mAb recognizes human TWINKLE protein, immunocytochemistry on frozen cytopsin preparations of human TWINKLE expressed in HEK293 cell line was performed. Cytospin preparation of human TRAT1 protein was used as a negative control. Anti-GFP was used as positive control.



## | WB | ***Western Blotting***

CELI38A mAb is able to detect human TWINKLE protein by WB.

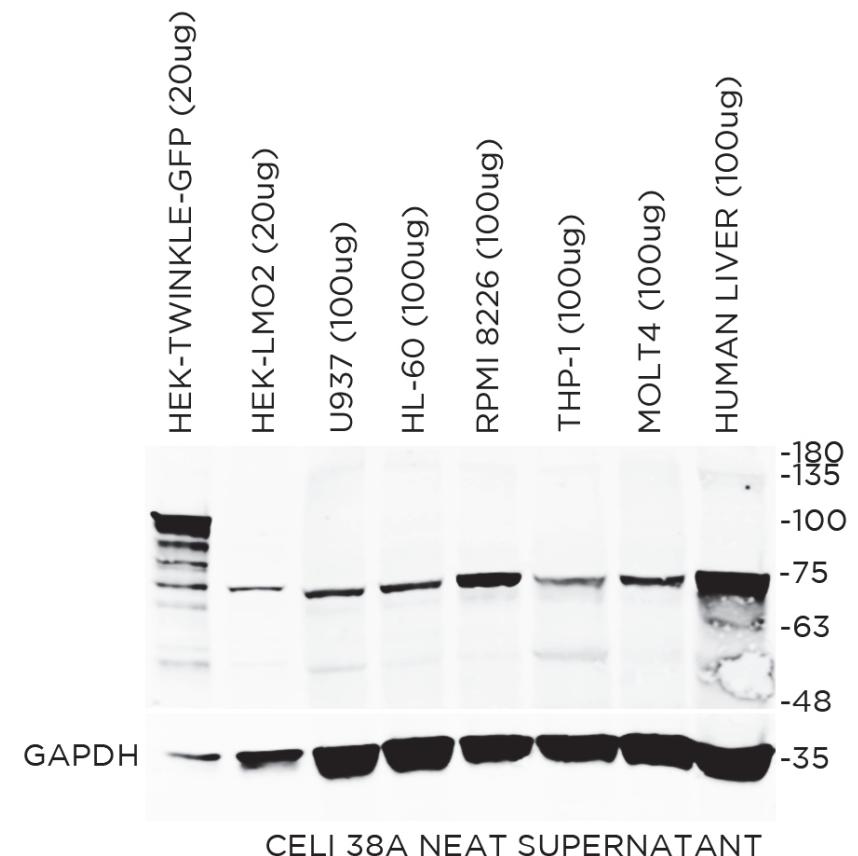
**DILUTION** neat supernatant

Predicted molecular weight **70kDa**  
Observed molecular weight **70kDa**

### **LANES**

Lane 1 Twinkle-GFP transfected HEK293T	(20ug) (+)
Lane 2 LMO2 transfected HEK293T	(20ug) (+)
Lane 3 U937	(100ug) (+)
Lane 4 HL-60	(100ug) (+)
Lane 5 RPMI 8226	(100ug) (+)
Lane 6 THP-1	(100ug) (+)
Lane 7 MOLT4	(100ug) (+)
Lane 8 Human Liver	(100ug) (+)

GAPDH was used as loading control



## | IHC-P | *Immunohistochemistry (paraffin)*

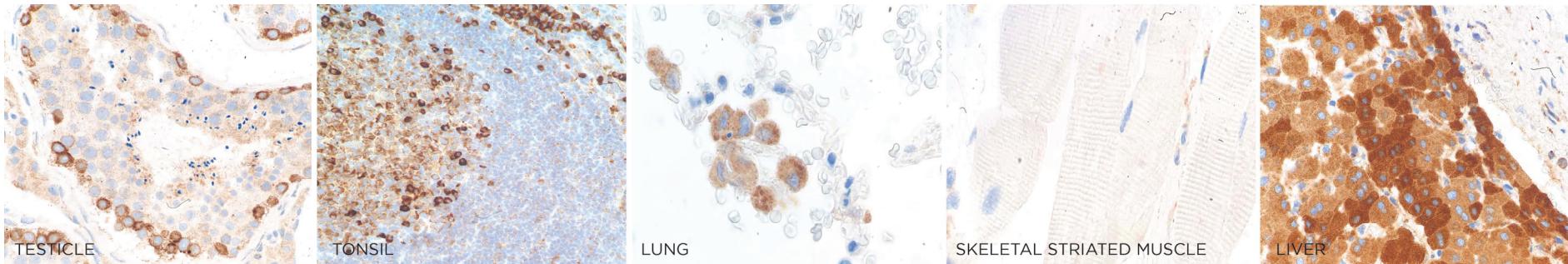
CELI38A mAb can be used to detect TWINKLE protein in human paraffin tissues

**TISSUE SAMPLE** Human testicle, tonsil, lung, skeletal striated muscle and liver

**DILUTION** 1:180 (supernatant)

**ANT. RETRIEVAL** 20 minutes ER2 (Tris-EDTA)

**DETECTION SYSTEM** Novolink kit (BondMax Leica)



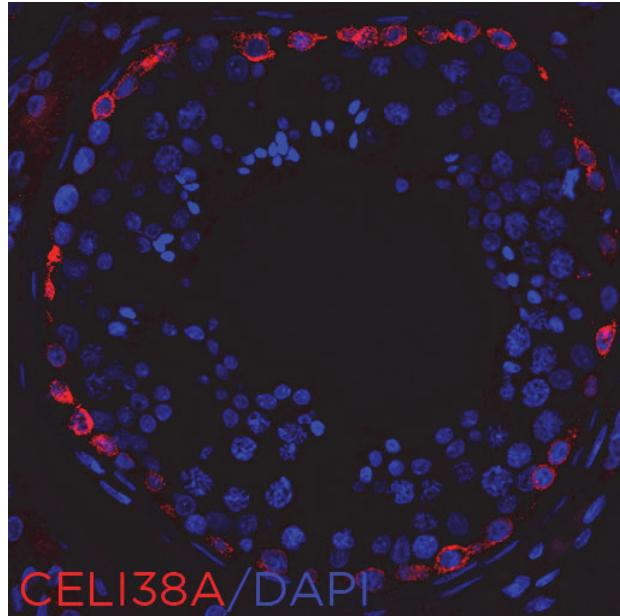
 | IF | **Immunofluorescence (paraffin)**

CELI38A mAb can be used to detect TWINKLE protein by immunofluorescence

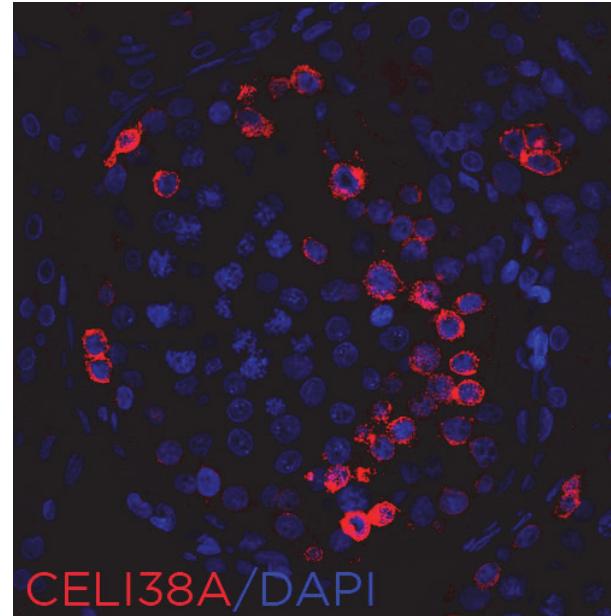
**TISSUE SAMPLE** Human Testicle

**DILUTION** 1:40 supernatant

**ANT RETRIEVAL** 20 minutes ER2 (Tris-EDTA)



CELI38A/DAPI



CELI38A/DAPI

 | IHC-F | **Immunohistochemistry (frozen)** Not tested

 | FC | **Flow Cytometry** Not tested

 | IP | **Immunoprecipitation** Not recommended