10320 Camino Santa Fe, Suite G
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# ICT1 Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP20382b**

## Specification

### ICT1 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | Q14197 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **153-179** |

### ICT1 Antibody (C-term) - Additional Information

**Gene ID** 3396

**Other Names**
Peptidyl-tRNA hydrolase ICT1, mitochondrial, 39S ribosomal protein L58, mitochondrial, MRP-L58, Digestion substraction 1, DS-1, Immature colon carcinoma transcript 1 protein, ICT1, DS1

**Target/Specificity**
This ICT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 153-179 amino acids from the C-terminal region of human ICT1.

**Dilution**
WB~~1:1000
IHC-P~~1:25

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
ICT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### ICT1 Antibody (C-term) - Protein Information

**Name** MRPL58 (HGNC:5359)

**Synonyms** DS1, ICT1

**Function** Essential peptidyl-tRNA hydrolase component of the mitochondrial large ribosomal subunit (PubMed:20186120, PubMed:33878294). Acts as a codon-independent translation release factor that has lost all stop codon specificity and directs the termination of translation in mitochondrion, possibly in case of abortive elongation (PubMed:33878294). Involved in the hydrolysis of peptidyl-tRNAs that have been prematurely terminated and thus in the recycling of stalled mitochondrial ribosomes (PubMed:20186120, PubMed:33878294).

**Cellular Location**
Mitochondrion

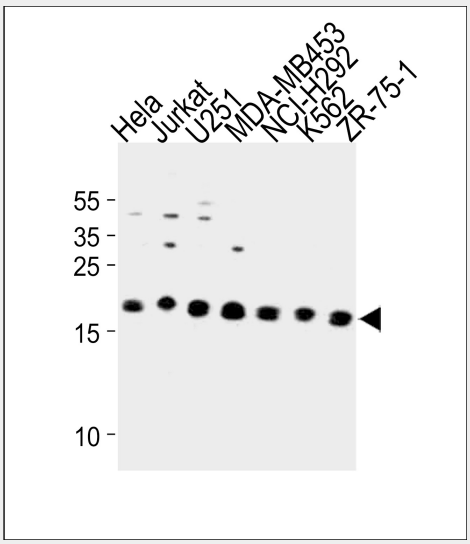
**Tissue Location**
Down-regulated during the in vitro differentiation of HT29-D4 colon carcinoma cells.

## ICT1 Antibody (C-term) - Protocols

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

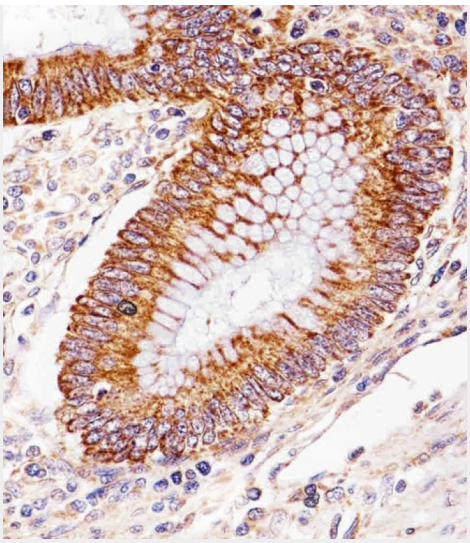
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## ICT1 Antibody (C-term) - Images

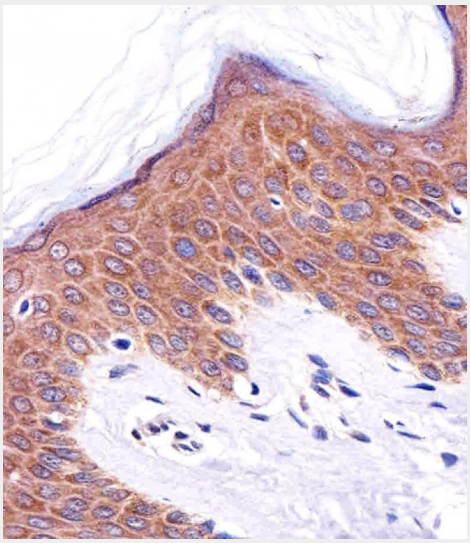



ICT1 Antibody (C-term) (Cat. #AP20382b) western blot analysis in Hela,Jurkat,U251,MDA-MB453,NCI-H292,K562,ZR-75-1 cell line lysates (35ug/lane).This demonstrates the ICT1 antibody detected the ICT1 protein (arrow).

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Immunohistochemical analysis of paraffin-embedded H. colorectal carcinoma section using ICT1 Antibody (C-term)(Cat#AP20382b). AP20382b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. skin section using ICT1 Antibody (C-term)(Cat#AP20382b). AP20382b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

**ICT1 Antibody (C-term) - Background**

Essential peptidyl-tRNA hydrolase component of the mitochondrial large ribosomal subunit. Acts as a codon-independent translation release factor that has lost all stop codon specificity and directs the termination of translation in mitochondrion, possibly in case of abortive elongation. May be involved in the hydrolysis of peptidyl-tRNAs that have been prematurely terminated and thus in the recycling of stalled mitochondrial ribosomes.

**ICT1 Antibody (C-term) - Citations**

- ICT1 Promotes Osteosarcoma Cell Proliferation and Inhibits Apoptosis via STAT3/BCL-2 Pathway
- Knockdown of immature colon carcinoma transcript 1 induces suppression of proliferation, S-phase arrest and apoptosis in leukemia cells.
- Immature colon carcinoma transcript-1 promotes cell growth of hepatocellular carcinoma via facilitating cell cycle progression and apoptosis resistance.

- miR-205 regulation of ICT1 has an oncogenic potential via promoting the migration and invasion of gastric cancer cells.
- Immature colon carcinoma transcript-1 promotes proliferation of gastric cancer cells.
- ICT1 knockdown inhibits breast cancer cell growth via induction of cell cycle arrest and apoptosis.
- Knockdown of Immature Colon Carcinoma Transcript 1 Inhibits Proliferation and Promotes Apoptosis of Non-Small Cell Lung Cancer Cells.
- Knockdown of immature colon carcinoma transcript-1 inhibits proliferation of glioblastoma multiforme cells through Gap 2/mitotic phase arrest.