# **PRODUCT INFORMATION**

Catalog number ATGA0263

Clone No. AT1E9

**Product type** Monoclonal Antibody

**UnitProt No.** Q14197

NCBI Accession No. NP\_001536

### **Alternative Names**

Peptidyl-tRNA hydrolase ICT1 mitochondrial, Peptidyl-tRNA hydrolase ICT1, mitochondrial, DS-1, DS1

# **PRODUCT SPECIFICATION**

Antibody Host Mouse

Reacts With Human

Concentration 1mg/ml (determined by BCA assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

#### Immunogen

Recombinant human ICT1 (30-206aa) purified from E. coli

# lsotype

lgG1 kappa

**Purification Note** By protein-A affinity chromatography

# Application

ELISA,WB,FACS

# Usage

The antibody has been tested by ELISA, Western blot and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

### Storage

For research use only. This product is not intended or approved for human, diagnostics or veterinary use. Website: www.nkmaxbio.com email: supportbio@nkmax.com



NKMAXBIO we support you, we believe in your research Human ICT1 antibody Catalog Number: ATGA0263

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

## Description

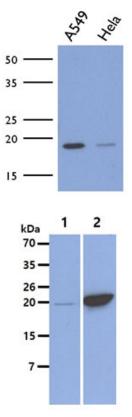
Peptidyl-tRNA hydrolase ICT1 acts as a codon-independent translation release factor that has lost all stop codon specificity and directs the termination of translation in mitochondrion, possibly in case of abortive elongation. The adult colon epithelium contains 3 differentiated cell types that arise from a multipotent stem cell. Deviation from the normal maturation pathway by neoplastic transformation is thought to initiate in stem cells or their early descendants. This neoplastic-induced deviation is marked by a change in expression of several mRNAs. ICT1 is a member of the prokaryotic/mitochondrial release factor family whose expression is downregulated over 4 fold upon colon stem cell differentiation. This downregulation of ICT1 could lead to its use as a marker for detection of colon carcinomas.

### **General References**

Richter R., et al. (2010) EMBO J. 29:1116-1125. van Belzen N., et al. (1995) Eur. J. Biochem. 234:843-848.

### DATA

### Western blot analysis (WB)



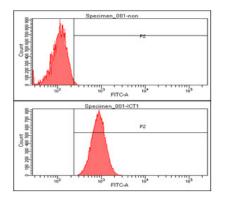
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ICT1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

The cell lysates (5ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human ICT1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: 293T cell lysate Lane 2.: ICT Transfected 293T cell lysate

## Flow cytometry (FACS)



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Flow cytometry analysis of ICT1 in A549 cell line, staining at 2-5ug for  $1x10^{6}$  cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.