

Human ICT1 antibody

Catalog Number: ATGA0263

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

Isotype

IgG1 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

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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.

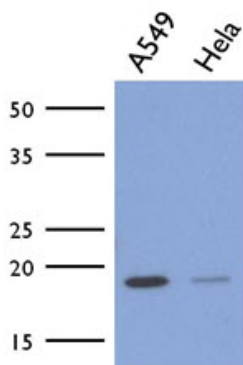
General References

Richter R., et al. (2010) EMBO J. 29:1116-1125.

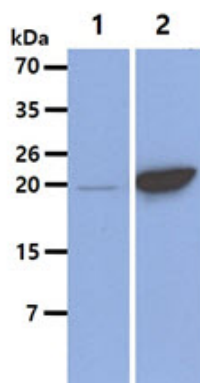
van Belzen N., et al. (1995) Eur. J. Biochem. 234:843-848.

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.

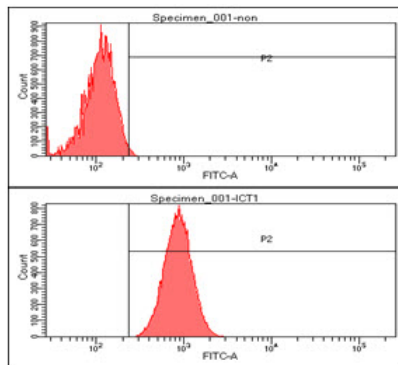
Lane 1.: 293T cell lysate

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 1x10⁶ cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.