

# CoraLite®594-conjugated DNASE1L3 Monoclonal antibody

Catalog Number: **CL594-67041**

## Basic Information

**Catalog Number:**

CL594-67041

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG2a

**Immunogen Catalog Number:**

AG28187

**GenBank Accession Number:**

BC015831

**GeneID (NCBI):**

1776

**UNIPROT ID:**

Q13609

**Full Name:**

deoxyribonuclease I-like 3

**Calculated MW:**

305 aa, 36 kDa

**Observed MW:**

33-38 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

1A4D4

**Recommended Dilutions:**

IF/ICC 1:50-1:500

**Excitation/Emission maxima wavelengths:**

588 nm / 604 nm

## Applications

**Tested Applications:**

IF/ICC, FC (Intra)

**Species Specificity:**

human, mouse

**Positive Controls:**

IF/ICC : HepG2 cells,

## Background Information

Deoxyribonuclease 1-like 3 (DNASE1L3, DNase gamma, DNase Y, LS-DNase) is member of a DNASE1 protein family that is identified by similar biochemical properties such as Ca<sup>2+</sup>/Mg<sup>2+</sup>- dependency and an optimal pH of about 7.0 as well as by a high similarity in their nucleic acid and amino acid sequences [PMID:15796714]. It is an endonuclease and cleaves double-stranded DNA (and single-stranded DNA) producing 3' -OH/5' -P ends, which is Ca<sup>2+</sup>/Mg<sup>2+</sup>-dependent and inhibited by Zn<sup>2+</sup>, but not by monomeric actin [PMID:9665719]. In addition, it has been suggested to be involved in apoptotic DNA fragmentation of thymocytes' neuronal PC12 cells, C2C12 myoblasts and of cell lines expressing the recombinant nuclease [PMID: 7957253, 9307016]

## Storage

**Storage:**

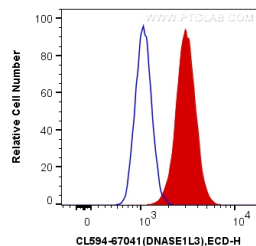
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

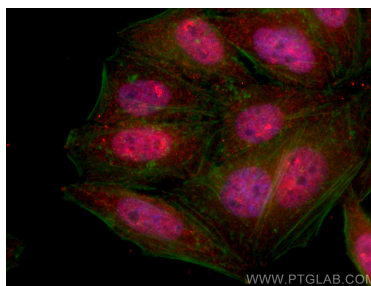
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug CoraLite® 594 Anti-Human DNASE1L3 (CL594-67041, Clone:1A4D4) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL594-66360-2, Clone: K11A1B2A2) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® 594 DNASE1L3 antibody (CL594-67041, Clone: 1A4D4) at dilution of 1:200, CL488-Phalloidin (green).