

# IHC*easy* TIA1 Ready-To-Use IHC Kit

Catalog Number: **KHC1578**

## General Information

**Sample type:**  
FFPE tissue

**Cited sample type:**

**Reactivity:**  
Human, Mouse, Rat

**Cited Reactivity:**

**Assay type:**  
Immunohistochemistry

**Primary antibody type:**  
Mouse Monoclonal

**Secondary antibody type:**  
Polymer-HRP-Goat anti-Mouse

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

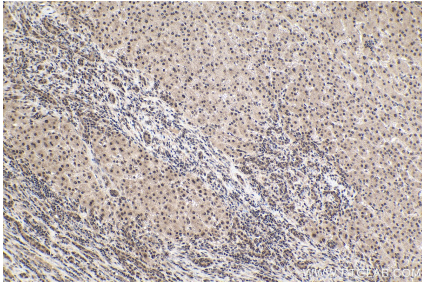
## Background

TIA1, also named as p40-TIA-1, is involved in alternative pre-RNA splicing and regulation of mRNA translation by binding to AU-rich elements (AREs) located in mRNA 3' untranslated regions (3' UTRs). It possesses nucleolytic activity against cytotoxic lymphocyte target cells. Similar to the ALS-related disease proteins TDP-43, hnRNPA1, and FUS, TIA1 is an RNA-binding protein containing a prionlike LCD and assembles into membrane-less organelles, including SGs. Postmortem neuropathology of five TIA1 mutations carriers showed a consistent pathological signature with numerous round, hyaline, TAR DNA-binding protein 43 (TDP-43)-positive inclusions. TIA1 mutations significantly increased the propensity of TIA1 protein to undergo phase transition. In live cells, TIA1 mutations delayed stress granule (SG) disassembly and promoted the accumulation of non-dynamic SGs that harbored TDP-43.

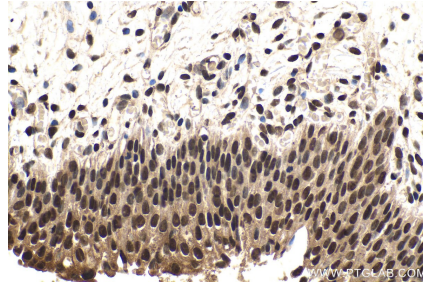
## Synonyms

Nucleolysin TIA 1 isoform p40, p40 TIA 1, RNA binding protein TIA 1, TIA 1, TIA1

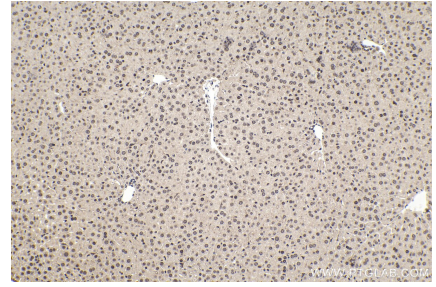
## Selected Validation Data



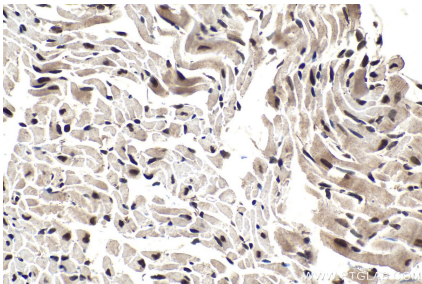
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using KHC1578 (TIA1 IHC Kit).



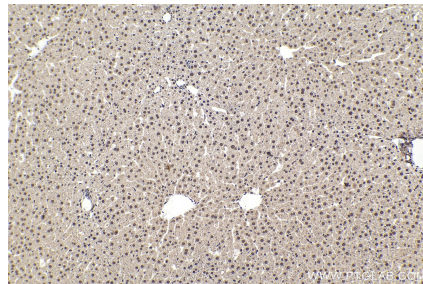
Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using KHC1578 (TIA1 IHC Kit).



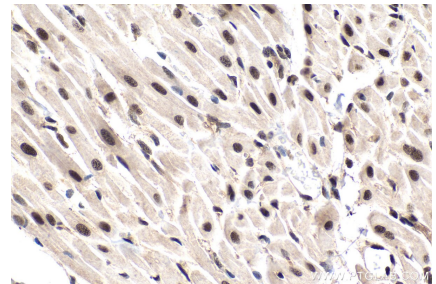
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using KHC1578 (TIA1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using KHC1578 (TIA1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using KHC1578 (TIA1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat heart tissue slide using KHC1578 (TIA1 IHC Kit).