Product Datasheet

TUT1 Antibody

Catalog No: #35114

Package Size: #35114-1 50ul #35114-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

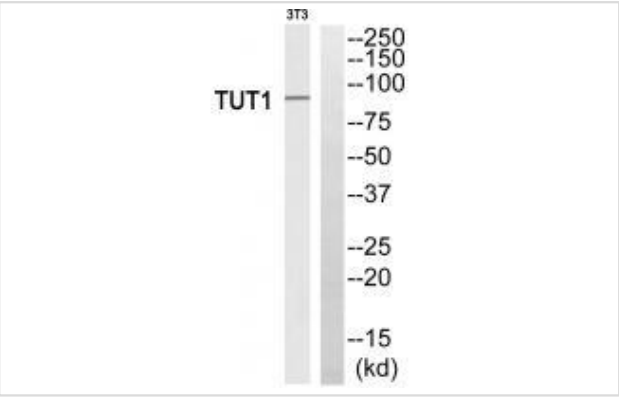
Product Name	TUT1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total TUT1 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human TUT1.
Target Name	TUT1
Other Names	U6 snRNA-specific terminal uridylyltransferase 1; EC 2.7.7.52; U6-TUTase; RNA-binding protein 21; RNA-binding motif protein 21
Accession No.	Swiss-Prot: Q9H6E5NCBI Gene ID: 64852
Uniprot	Q9H6E5
GeneID	64852;
SDS-PAGE MW	95kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

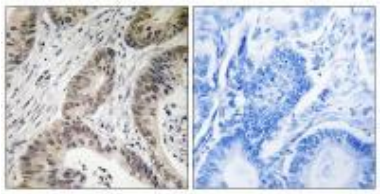
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from 3T3 cells, using TUT1 antiobdy #35114.



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue using TUT1 antibody #35114.

Background

Poly(A) polymerase that creates the 3'-poly(A) tail of specific pre-mRNAs. Localizes to nuclear speckles together with PIP5K1A and mediates polyadenylation of a select set of mRNAs, such as HMOX1. In addition to polyadenylation, it is also required for the 3'-end cleavage of pre-mRNAs: binds to the 3'UTR of targeted pre-mRNAs and promotes the recruitment and assembly of the CPSF complex on the 3'UTR of pre-mRNAs. In addition to adenylyltransferase activity, also has uridylyltransferase activity. However, the ATP ratio is higher than UTP in cells, suggesting that it functions primarily as a poly(A) polymerase. Acts as a specific terminal uridylyltransferase for U6 snRNA in vitro: responsible for a controlled elongation reaction that results in the restoration of the four 3'-terminal UMP-residues found in newly transcribed U6 snRNA. Not involved in replication-dependent histone mRNA degradation.

Ota T., Nat. Genet. 36:40-45(2004).
The MGC Project Team, Genome Res. 14:2121-2127(2004).
Trippe R.,RNA 12:1494-1504(2006).

Note: This product is for in vitro research use only