

CTHRC1 Antibody

Catalog # ASC11896

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96CG8
Other Accession	NP_612464 , 19923989
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	26224
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CTHRC1 antibody can be used for detection of CTHRC1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

Additional Information

Gene ID	115908
Other Names	Collagen triple helix repeat-containing protein 1, Protein NMTC1, CTHRC1
Target/Specificity	CTHRC1; CTHRC1 antibody is human, mouse and rat reactive. At least two isoforms of CTHRC1 are known to exist; this antibody will detect only the larger isoform.
Reconstitution & Storage	CTHRC1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
Precautions	CTHRC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CTHRC1
Function	May act as a negative regulator of collagen matrix deposition.
Cellular Location	Secreted, extracellular space, extracellular matrix
Tissue Location	Isoform 1 is expressed in calcified atherosclerotic plaque and chondrocyte-like cells.

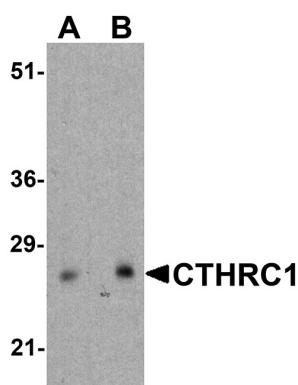
Background

The Collagen triple helix repeat-containing protein (CTHRC1) is a glycosylated, secreted protein that is transiently expressed in the arterial wall in response to injury where it is thought to contribute to vascular remodeling by inhibiting collagen expression and deposition and promoting cell migration (1). CTHRC1 is highly expressed multiple human cancers, including pancreatic cancer where it plays a significant role in the progression and metastasis of the disease by regulating migration and adhesion of tumors cells (2). CTHRC1 overexpression can also be used as an independent prognostic marker in gastric cancer (3). Mutations at this locus have been associated with Barrett esophagus and esophageal adenocarcinoma (4).

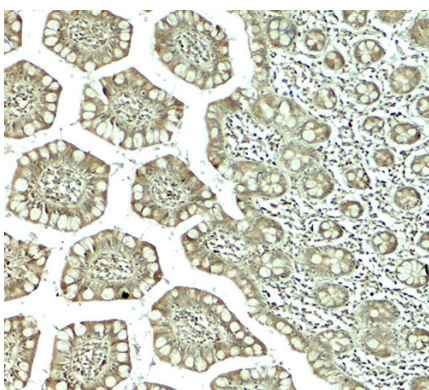
References

- Pygay P, Heroult M, Wang Q, et al. Collagen triple helix repeat containing 1, a novel secreted protein in injured and diseased arteries, inhibits collagen expression and promotes cell migration. *Circ. Res.* 2005; 96:261-8.
- Park EH, Kim S, Jo JY, et al. Collagen triple helix repeat containing-1 promotes pancreatic cancer progression by regulating migration and adhesion of tumor cells. *Carcinogenesis* 2013; 34:694-702.
- Gu L, Liu L, Zhong L, et al. Cthrc1 overexpresion is an independent prognostic marker in gastric cancer. *Hum. Pathol.* 2014; 45:1031-8.
- Orloff M, Peterson C, He X, et al. Germline mutations in MSR1, ASCC1, and CTHRC1 in patients with Barrett esophagus and esophageal adenocarcinoma. *JAMA* 2011; 306:410-9.

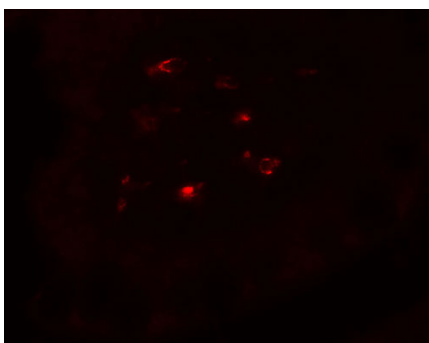
Images



Western blot analysis of CTHRC1 in rat small intestine tissue lysate with CTHRC1 antibody at (A) 1 and (B) 2 $\mu\text{g/ml}$.



Immunohistochemistry of CTHRC1 in human small intestine tissue with CTHRC1 antibody at 5 $\mu\text{g/mL}$.



Immunofluorescence of CTHRC1 in human small intestine tissue with CTHRC1 antibody at 20 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.