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# CTHRC1 Antibody

Catalog # ASC11896

## Product Information

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| **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 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL. |

## Additional Information

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| **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℃ for three months and -20℃, 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

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| **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

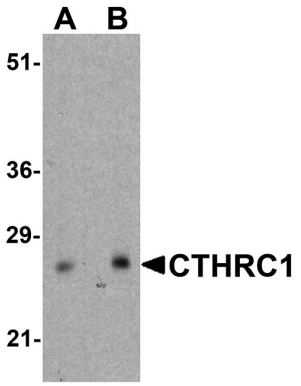

Pyagay P, Heroult M, Wang Q, et al. Collagen triple helix repeat containing 1, a novel secreted protein in injured and diseased arteries, inhibits collagen expression and promotes cell migration. Circ. Res. 2005; 96:261-8.

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.

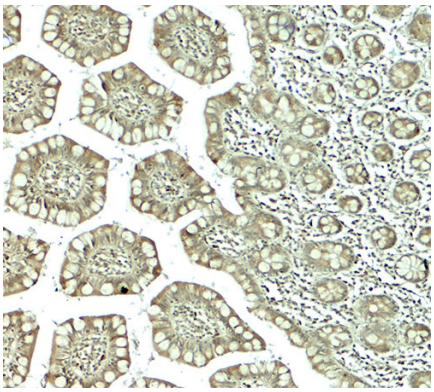
Gu L, Liu L, Zhong L, et al. Cthrc1 overexpresion is an independent prognostic marker in gastric cancer. Hum. Pathol. 2014; 45:1031-8.

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.

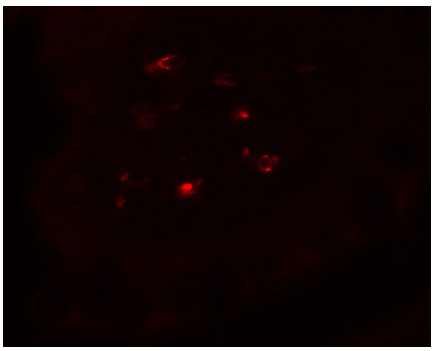

## Images




Western blot analysis of CTHRC1 in rat small intestine tissue lysate with CTHRC1 antibody at (A) 1 and (B) 2 µg/ml.



Immunohistochemistry of CTHRC1 in human small intestine tissue with CTHRC1 antibody at 5 µg/mL.



Immunofluorescence of CTHRC1 in human small intestine tissue with CTHRC1 antibody at 20 µg/mL.

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