

## Product datasheet for **CF504351**

### Calpastatin (CAST) Mouse Monoclonal Antibody [Clone ID: OT11E7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OT11E7
Applications:	FC, IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150, FLOW 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human CAST(NP_001741) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	84.8 kDa
Gene Name:	calpastatin
Database Link:	<a href="#">NP_001741</a> <a href="#">Entrez Gene 831 Human</a> <a href="#">P20810</a>



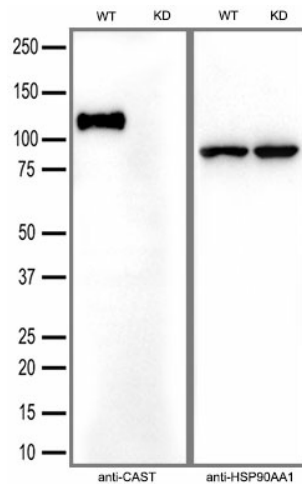
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**Background:**

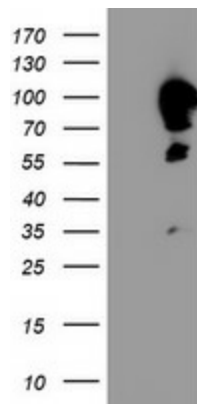
The protein encoded by this gene is an endogenous calpain (calcium-dependent cysteine protease) inhibitor. It consists of an N-terminal domain L and four repetitive calpain-inhibition domains (domains 1-4), and it is involved in the proteolysis of amyloid precursor protein. The calpain/calpastatin system is involved in numerous membrane fusion events, such as neural vesicle exocytosis and platelet and red-cell aggregation. The encoded protein is also thought to affect the expression levels of genes encoding structural or regulatory proteins. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq]

**Synonyms:**

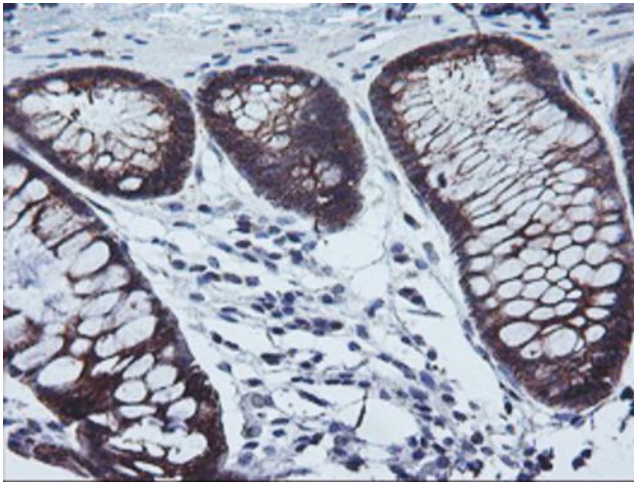
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**Product images:**


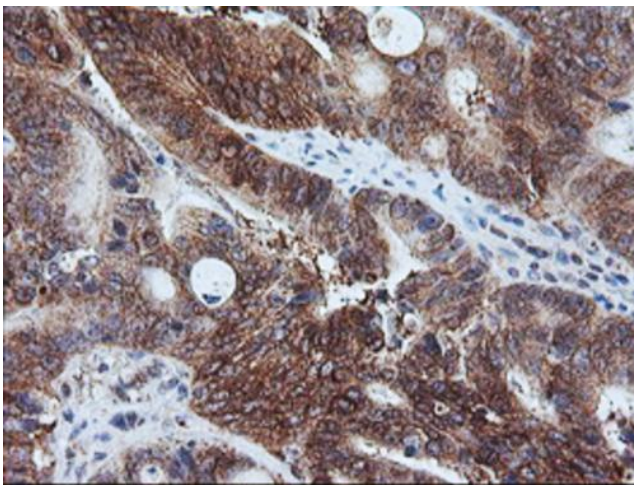
Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells (WT) and CAST-Knockdown HeLa cells(KD) were separated by SDS-PAGE and immunoblotted with anti-CAST monoclonal antibody [TA504351](1:5000). Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.



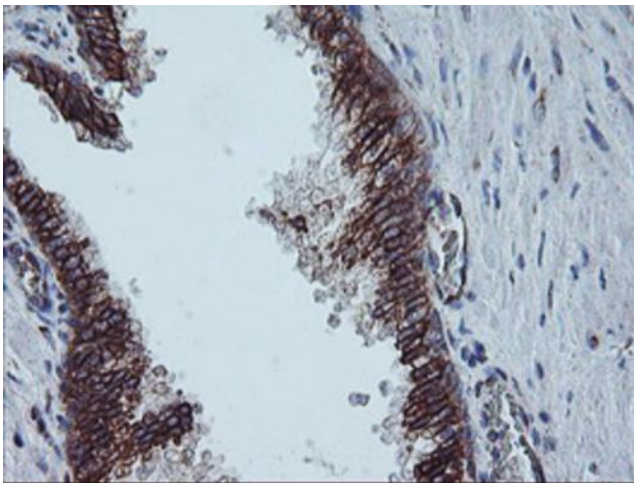
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CAST (Cat# [RC211776], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CAST (Cat# [TA504351]). Positive lysates [LY400663] (100ug) and [LC400663] (20ug) can be purchased separately from OriGene.



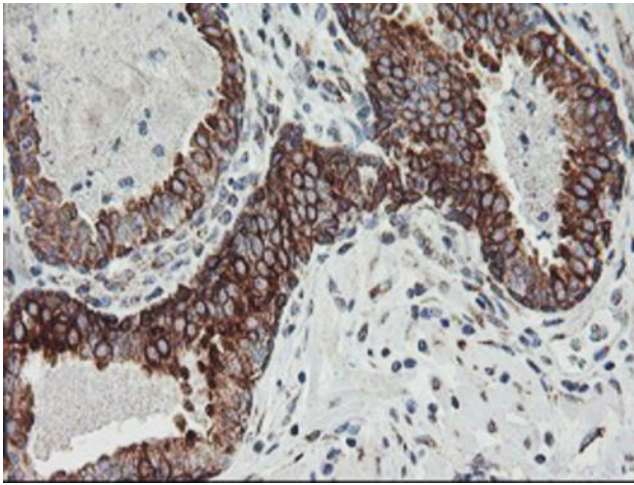
Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-CAST mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



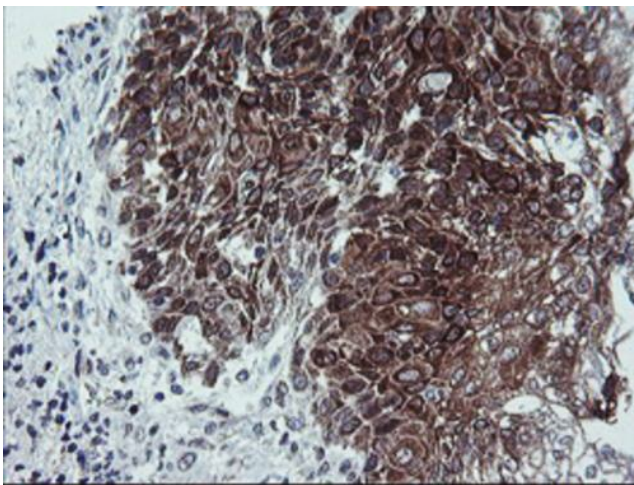
Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-CAST mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



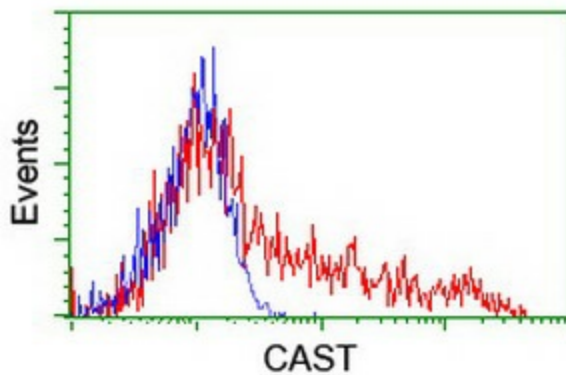
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-CAST mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-CAST mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-CAST mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



HEK293T cells transfected with either [RC211776] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-CAST antibody ([TA504351]), and then analyzed by flow cytometry.