

## 36-3416: Anti-Calpastatin Monoclonal Antibody(Clone: CAST/1550)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CAST/1550
<b>Application :</b>	ELISA,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	CAST
<b>Gene ID :</b>	831
<b>Uniprot ID :</b>	P20810
<b>Alternative Name :</b>	BS 17; Calpain inhibitor; Calpastatin; Cast; Heart type calpastatin; Sperm BS 17 component
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Recombinant full-length human CAST protein

### Description

Calpastatin is an intracellular calcium-dependent protease that cleaves cytoskeletal and sub-membranous proteins. Calpains are non-lysosomal, calcium-activated intracellular cysteine proteases. Calpains mediate specific Ca<sup>2+</sup>- dependent processes including cell fusion, mitosis and meiosis. Calpains are heterodimers of a small regulatory subunit and one of three large catalytic subunits, designated Calpastatin, Calpain 2 and Calpain p94. Calpastatin regulates Calpain by inhibiting both the proteolytic activity of Calpain and its binding to membranes. Calpastatin exists in two types, tissue type and erythrocyte type, resulting from both alternative splicing and proteolytic processing. Calpastatin co-localizes with human leukocyte antigen-DR (HLA-DR) on activated microglia in the aging brain. Calpain influences the process of spermatogenesis and the events preceding fertilization, such as the acrosome reaction.

### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

### Application Note

ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes);

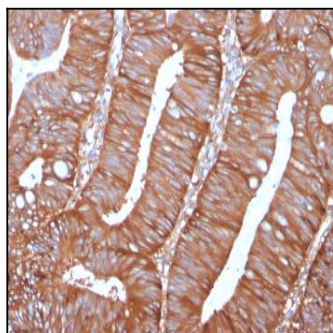


Fig. 1: Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Calpastatin Mouse Monoclonal Antibody (CAST/1550).

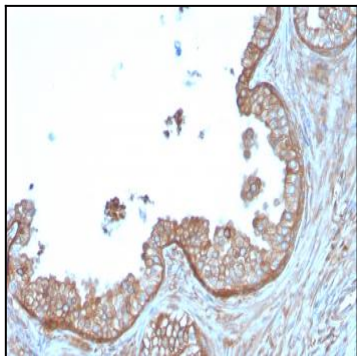


Fig. 2: Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with Calpastatin Mouse Monoclonal Antibody (CAST/1550).

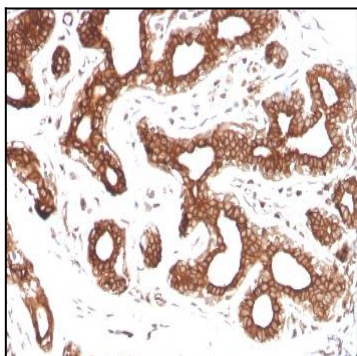


Fig. 3: Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with Calpastatin Mouse Monoclonal Antibody (CAST/1550).

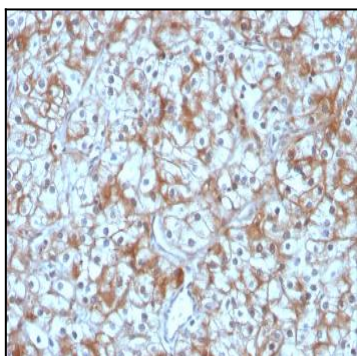


Fig. 4: Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with Calpastatin Mouse Monoclonal Antibody (CAST/1550).

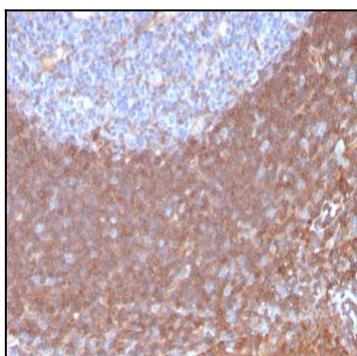


Fig. 5: Formalin-fixed, paraffin-embedded human Tonsil stained with Calpastatin Mouse Monoclonal Antibody (CAST/1550).

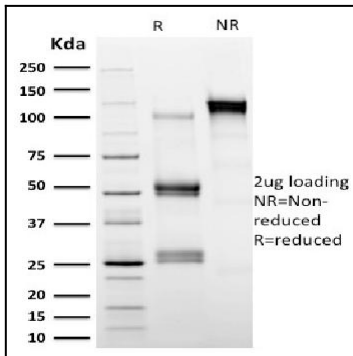


Fig. 6: SDS-PAGE Analysis Purified Calpastatin Mouse Monoclonal Antibody (CAST/1550). Confirmation of Integrity and Purity of Antibody.