

Mouse Calpastatin (CAST) ELISA Kit-Sandwich

Cat. No.: EK5F970

Product Type: Animal Immunoassay Kits

Size: 48T;96T

Product Overview

BioVenic Mouse Calpastatin (CAST) ELISA Kit-Sandwich is designed for the quantitative determination of Mouse CAST in serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids using a Sandwich ELISA method. For research use only.

Specifications

Assay Type	ELISA-Sandwich
Specificity	The assay kit is specific for Mouse Calpastatin (CAST).
Target Species	Mouse
Species Reactivity	Mouse
Detection Range	0.17-10 ng/mL
Reproducibility	Intra-Assay: CV < 10%; Inter-Assay: CV < 12%
Assay Time	Around 90 min
Sample Requirement	Serum, plasma, tissue homogenate, cell culture supernatant, cell lysate, and other biological fluids.

Target Information

Calpastatin is crucial for postmortem meat tenderization and is thought to be involved in muscle protein degradation in living tissues. In mice, calpastatin serves various physiological functions, such as regulating muscle metabolism, inhibiting inflammatory responses, protecting neurons, and enhancing cardiovascular function. In mouse models, it mitigates inflammatory responses by inhibiting calpain activity. For instance, in a multiple sclerosis (MS) model, calpastatin overexpression reduces inflammatory cell infiltration and proinflammatory cytokine release, thereby ameliorating the pathological condition. Additionally, calpastatin exhibits similar effects in sepsis models, enhancing mouse survival rates by reducing inflammation and coagulation disorders.

Target/Biomarker	Mouse CAST
Target Synonym	BS17; Calpain inhibitor; Sperm BS-17 component
Gene ID	12380

Shipping and Storage

This product is shipped with gel ice packs. It is recommended to store at 2-8 °C (Up to 6 months).

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.