

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cystatin E/M in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant mouse Cystatin E/M is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Cystatin E/M Arg29-Met149 Accession # Q15828
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Cystatin E/M encoded by the CST6 gene is a member of family 2 of the cystatin superfamily (1, 2). It inhibits papain and cathepsin B, two of the cysteine proteases. Its mRNA was found in many tissues by the two groups who did initial cloning (1, 2). However, its protein was found only in skin and sweat glands by a third group (3). In addition to being a cysteine protease inhibitor, cystatin E/M is also a substrate for transglutaminases (3). It is required for viability and for correct formation of cornified layers in the epidermis and hair follicles, as *ichq* mice, with a null mutation in the cystatin E/M gene, have defects in epidermal cornification and die between 5 and 12 days of age (4). Cystatin E/M expression and function may not be limited to cutaneous epithelia. For example, it is found in rat brain and is induced during neuronal cell differentiation (5).

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