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Anti-Filaggrin Antibody

Mouse Monoclonal Antibody
Catalog # AH13222

Product Information

Application	IHC-P, IF, FC
Primary Accession	P20930
Other Accession	654510
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	FLG/1562
Calculated MW	435170

Additional Information

Gene ID	2312
Other Names	ATOD2; Epidermal Filaggrin; Filaggrin; Filaggrin precursor; Fillagrin; FLG; Profilaggrin
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/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.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Filaggrin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

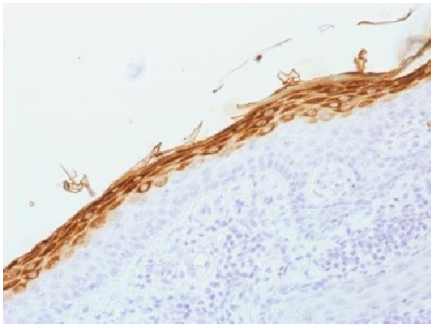
Name	FLG
Function	Aggregates keratin intermediate filaments and promotes disulfide-bond formation among the intermediate filaments during terminal differentiation of mammalian epidermis.
Cellular Location	Cytoplasmic granule. Note=In the stratum granulosum of the epidermis,

	localized within keratohyalin granules (PubMed:1429717). In granular keratinocytes and in lower corneocytes, colocalizes with calpain-1/CAPN1 (PubMed:21531719).
Tissue Location	Expressed in skin, thymus, stomach, tonsils, testis, placenta, kidney, pancreas, mammary gland, bladder, thyroid, salivary gland and trachea, but not detected in heart, brain, liver, lung, bone marrow, small intestine, spleen, prostate, colon, or adrenal gland (PubMed:19384417). In the skin, mainly expressed in stratum granulosum of the epidermis (PubMed:1429717, PubMed:19384417)

Background

Filaggrin is an intermediate filament-associated protein that aggregates keratin intermediate filaments in mammalian epidermis. It is initially synthesized as a polyprotein precursor, profilaggrin (consisting of multiple filaggrin units of 324 aa each), which is localized in keratohyalin granules, and is subsequently proteolytically processed into individual functional filaggrin molecules. Active filaggrin is present at a level of the epidermis where keratinocytes are in transition between the live nucleated granular layer and the anucleate cornified layer, suggesting that filaggrin aids in the terminal differentiation process by facilitating apoptotic machinery.

Images



Formalin-fixed, paraffin-embedded human Skin stained with Filaggrin Monoclonal Antibody (FLG/1562).