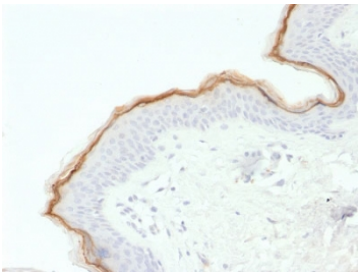
Filaggrin Antibody / FLG [clone FLG/1563] (V3840)

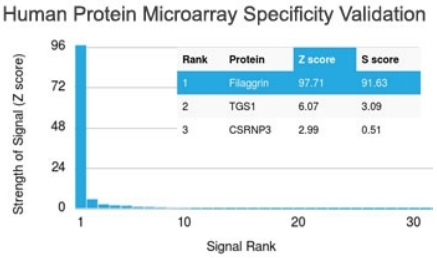
Catalog No.	Formulation	Size
V3840-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3840-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3840SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

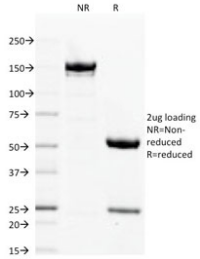
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	FLG/1563
Purity	Protein G affinity chromatography
UniProt	P20930
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Filaggrin antibody is available for research use only.



IHC analysis of Filaggrin using Filaggrin antibody (clone FLG/1563). Formalin-fixed, paraffin-embedded human skin tissue was analyzed. Brown chromogenic signal is observed along the epidermal layer, consistent with Filaggrin-positive stratified squamous epithelial cells. Required heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 minutes prior to staining.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Filaggrin antibody (clone FLG/1563). These results demonstrate the foremost specificity of the FLG/1563 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Filaggrin antibody (clone FLG/1563) as confirmation of integrity and purity.

Description

Filaggrin antibody recognizes Filaggrin, a large epidermal structural protein encoded by the FLG gene that plays a central role in keratinocyte differentiation and formation of the skin barrier. Filaggrin is synthesized as a high-molecular-weight precursor, profilaggrin, which is stored in keratohyalin granules within the granular layer of the epidermis and subsequently processed into multiple functional Filaggrin monomers during terminal differentiation. These monomers aggregate keratin intermediate filaments, contributing to the mechanical strength and integrity of the stratum corneum.

Filaggrin expression is tightly linked to epidermal maturation and barrier function. Following its role in keratin filament aggregation, Filaggrin is further degraded into free amino acids and their derivatives, which contribute to natural moisturizing factors that regulate skin hydration, pH balance, and antimicrobial defense. Disruption of Filaggrin processing or expression compromises epidermal barrier integrity and alters cutaneous homeostasis.

Genetic variation or reduced expression of Filaggrin is strongly associated with common inflammatory skin disorders, including atopic dermatitis, ichthyosis vulgaris, and increased susceptibility to allergic sensitization. As a result, detection of Filaggrin expression is widely used in dermatopathology and skin biology research to evaluate epidermal differentiation status, barrier integrity, and disease-related alterations in stratified squamous epithelium.

FLG antibody, also referred to as Filaggrin antibody and filaggrin protein antibody in the literature, is frequently applied to visualize epidermal differentiation patterns and to distinguish normal from pathologically altered keratinization. Clone FLG/1563 is designed to recognize Filaggrin in research applications and produces characteristic staining within differentiated epidermal layers. This Filaggrin antibody is suitable for studies focused on skin biology, epithelial differentiation, and barrier-related disease mechanisms. Clone FLG/1563 is commonly used to support research into epidermal structure and Filaggrin-associated skin disorders.

Application Notes

Optimal dilution of the Filaggrin antibody should be determined by the researcher.

Immunogen

A portion of amino acids 998-1104 from the human protein were used as the immunogen for this Filaggrin antibody.

Storage

Store the Filaggrin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).