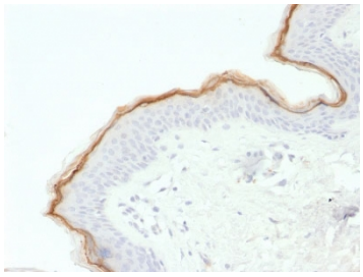
Filaggrin Antibody / Epidermal Differentiation Marker [clone FLG/1563] (V3840)

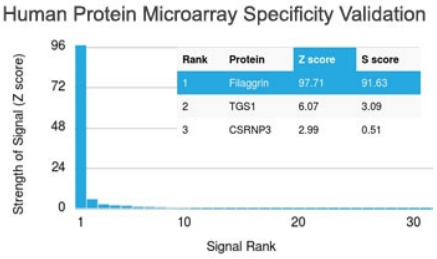
Catalog No.	Formulation	Size
V3840-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3840-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3840SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

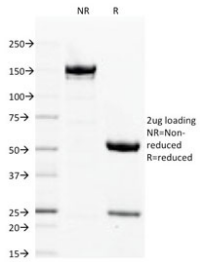
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	FLG/1563
Purity	Protein G affinity chromatography
UniProt	P20930
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for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



Filaggrin Antibody Skin IHC. Immunohistochemistry analysis of FFPE human skin tissue stained with Filaggrin antibody (clone FLG/1563). Strong HRP-DAB brown staining is observed within the superficial epidermal layers, consistent with the expected distribution of Filaggrin / FLG in differentiated stratified squamous epithelial cells involved in epidermal barrier formation and keratinocyte maturation. Tissue sections underwent HIER using 10mM Tris with 1mM EDTA buffer, pH 9, prior to immunostaining.



Filaggrin Antibody HuProt Microarray Specificity Validation. Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Filaggrin antibody clone FLG/1563 demonstrates highly selective recognition of Filaggrin / FLG. The intended Filaggrin target ranks first among all proteins analyzed on the array, with exceptionally strong separation from secondary signals, supporting the specificity profile of this mouse monoclonal antibody for epidermal differentiation and epithelial barrier biology research applications. Z-score represents signal intensity above background in standard deviation units, while S-score reflects the relative specificity of antibody binding compared with additional proteins present on the HuProt(TM) platform.



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

Description

Filaggrin (FLG) is a structural epidermal protein involved in keratin filament organization, epidermal differentiation, and formation of the skin barrier. Filaggrin Antibody / Epidermal Differentiation Marker is suitable for investigations involving keratinocyte maturation, epidermal barrier biology, epithelial differentiation pathways, and dermatopathology-associated signaling mechanisms. Filaggrin is synthesized as the large precursor protein profilaggrin within keratohyalin granules of differentiating keratinocytes and is subsequently processed into functional filaggrin monomers that contribute to epidermal barrier integrity.

Filaggrin antibody, also referred to as FLG antibody, Filament aggregating protein antibody, Epidermal barrier protein antibody, and Keratinocyte differentiation marker antibody in the literature, recognizes a major structural component of the cornified epithelium. Filaggrin promotes aggregation of keratin intermediate filaments during terminal keratinocyte differentiation and contributes to the formation of the stratum corneum. The protein is predominantly localized within differentiated suprabasal epithelial layers of the epidermis, consistent with its role in epithelial maturation and barrier formation pathways.

Epidermal differentiation proteins such as Filaggrin are essential for maintenance of cutaneous barrier function, epithelial integrity, and protection against environmental stress. Filaggrin degradation products additionally contribute to natural moisturizing factor production and regulation of epidermal hydration. Through its role in keratin organization and cornified envelope formation, Filaggrin participates in pathways controlling epithelial mechanical stability and barrier-associated homeostasis.

Altered Filaggrin expression and FLG gene mutations have been strongly associated with dermatologic disorders including atopic dermatitis, ichthyosis vulgaris, allergic sensitization syndromes, and skin barrier dysfunction. Because impaired epidermal barrier formation contributes to inflammatory skin disease and epithelial stress responses, Filaggrin remains an important biomarker in dermatology and epithelial differentiation research. The protein is also widely studied in investigations involving keratinocyte maturation, stratified epithelial biology, and skin-associated disease mechanisms.

Immunohistochemistry analysis supports detection of endogenous Filaggrin expression within differentiated epithelial tissues, consistent with the expected localization pattern of this epidermal structural protein. HuProt(TM) protein microarray specificity validation with clone FLG/1563 further demonstrates highly selective recognition of Filaggrin among more than 19,000 full-length human proteins. The combined validation profile supports use of this mouse monoclonal antibody for investigations involving epidermal differentiation, epithelial barrier biology, keratinocyte maturation pathways, and dermatopathology-associated signaling mechanisms.

An antibody targeting Filaggrin can therefore support studies involving epidermal barrier formation, epithelial differentiation pathways, keratin filament organization, skin-associated disease biology, and keratinocyte maturation-associated signaling networks.

Filaggrin functions in epidermal differentiation and epithelial barrier formation pathways; explore related epithelial and cellular regulatory proteins on our Cell Biology Antibodies landing page.

Application Notes

Optimal dilution of the Filaggrin Antibody / Epidermal Differentiation Marker 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).

Alternate Names

Filaggrin antibody, FLG antibody, Filament aggregating protein antibody, Epidermal barrier protein antibody, Keratinocyte differentiation marker antibody