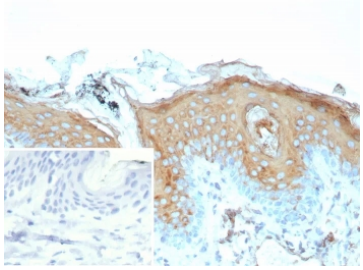
IVL Antibody rIVRN/9323 / IVRN Monoclonal Antibody [clone rIVRN/9323] (V5442)

Catalog No.	Formulation	Size
V5442-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5442-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5442SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

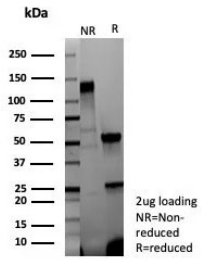
Recombinant MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2b, kappa
Clone Name	rIVRN/9323
Purity	Protein A/G affinity
UniProt	P07476
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This IVL Antibody rIVRN/9323 / IVRN Monoclonal Antibody is available for research use only.



IVL Antibody rIVRN/9323 in Human Skin IHC. Immunohistochemistry testing of FFPE human skin tissue with IVL Antibody clone rIVRN/9323. Tissue sections were subjected to HIER by boiling in pH 9 10 mM Tris with 1 mM EDTA for 20 min and allowed to cool before testing. The inset shows the secondary antibody negative control with PBS substituted for the primary antibody. Involucrin staining is concentrated in the differentiated suprabasal epidermal layers, consistent with its association with keratinocyte maturation. This stratified epithelial staining demonstrates tissue detection using the IVRN Monoclonal Antibody.



Purified IVL Antibody rIVRN/9323 SDS-PAGE. SDS-PAGE analysis of purified, BSA-free IVL Antibody clone rIVRN/9323 provides a quality-control assessment of antibody integrity and purity. The electrophoretic profile evaluates the purified recombinant mouse monoclonal preparation and confirms the expected immunoglobulin components under the conditions shown. This biochemical quality-control analysis supports the integrity of the purified IVRN Monoclonal Antibody preparation.

Description

IVL Antibody rIVRN/9323 recognizes involucrin, a structural protein encoded by the IVL gene and closely associated with terminal differentiation of stratified squamous epithelial cells. Involucrin is a well-established marker of keratinocyte maturation, with expression beginning as cells leave the proliferative basal compartment and progress into differentiated suprabasal layers. This spatial regulation makes involucrin useful for studying epithelial differentiation, epidermal development, and formation of the skin barrier.

Involucrin is synthesized as a soluble cytoplasmic protein before becoming incorporated into the cornified cell envelope. During terminal keratinocyte differentiation, transglutaminases catalyze covalent crosslinking of involucrin with other structural proteins near the inner surface of the plasma membrane. These reactions contribute to formation of the highly insoluble protein scaffold that provides mechanical stability to mature corneocytes.

The human protein contains an unusual central region composed largely of glutamine-rich tandem repeats. These glutamine residues provide numerous substrates for transglutaminase-mediated crosslinking and contribute to the distinctive biochemical properties of involucrin. Although human involucrin has a calculated molecular weight of approximately 68 kDa, it can migrate at substantially higher apparent molecular weights during SDS-PAGE because of its unusual repetitive amino acid composition.

IVL expression is strongly linked to epithelial differentiation state. In normal epidermis, involucrin is largely associated with suprabasal keratinocytes rather than proliferating basal cells. Changes in the timing, distribution, or abundance of involucrin expression have consequently been investigated in disorders of epidermal differentiation, hyperproliferative skin conditions, premalignant lesions, and squamous epithelial cancers. These characteristics also make involucrin useful in experimental systems examining the transition from proliferating keratinocytes to terminally differentiated cells.

Clone rIVRN/9323 is a recombinant monoclonal antibody directed against human involucrin. An IVL Antibody can therefore provide a useful marker for investigating epithelial maturation and cornified envelope biology. An IVL Antibody such as clone rIVRN/9323 provides a recombinant monoclonal reagent for studying involucrin expression, while an IVRN Monoclonal Antibody provides an alternative search terminology for research involving keratinocyte differentiation and stratified squamous epithelia.

For an alternative recombinant monoclonal targeting this protein, see our Involucrin Antibody IVRN/2113R / IVL Monoclonal Antibody page.

Application Notes

Optimal dilution of the IVL Antibody rIVRN/9323 / IVRN Monoclonal Antibody should be determined by the researcher.

Immunogen

Recombinant human full-length Involucrin protein was used as the immunogen for the IVL Antibody rIVRN/9323.

Storage

Aliquot the IVL Antibody rIVRN/9323 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Involucrin antibody, IVRN antibody, Epidermal Involucrin antibody, Keratinocyte Involucrin antibody, Cornified Envelope Involucrin antibody

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