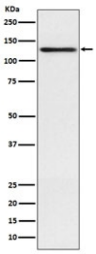
Recombinant Involucrin Antibody ABEA-9 / IVL Rabbit Monoclonal Antibody [clone ABEA-9] (RQ5180)

Catalog No.	Formulation	Size
RQ5180	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

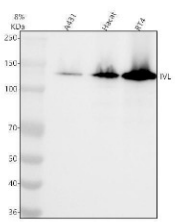
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ABEA-9
Purity	Affinity purified
UniProt	P07476
Applications	Western blot: 1:1000-1:5000
Limitations	This Recombinant Involucrin Antibody ABEA-9 is available for research use only.



Recombinant Involucrin Antibody ABEA-9 WB Analysis. Western blot testing of human A431 cell lysate with Involucrin antibody. Predicted molecular weight ~68 kDa but can be observed at up to ~140 kDa.



Recombinant Involucrin Antibody ABEA-9 Western Blot of A431, HaCaT and RT4 Cells. Western blot testing of human A431 (lane 1), HaCaT (lane 2), and RT4 (lane 3) whole cell lysates under reducing conditions with Recombinant Involucrin Antibody clone ABEA-9. A predominant IVL band is detected at approximately 120 kDa in all three lysates, with stronger signal in HaCaT and RT4 cells than A431 cells. Although the calculated molecular weight of involucrin is approximately 68 kDa, its glutamine-rich repetitive sequence causes characteristically anomalous migration on SDS-PAGE. The observed banding pattern supports specific detection of involucrin using this IVL Rabbit Monoclonal Antibody.

Description

Recombinant Involucrin Antibody ABEA-9 / IVL Rabbit Monoclonal Antibody recognizes involucrin, a structural protein encoded by the IVL gene and strongly associated with terminal differentiation of stratified squamous epithelial cells. Involucrin is widely used as a marker of keratinocyte differentiation because its expression increases as cells leave the proliferative basal compartment and progress toward a mature suprabasal phenotype. This regulated expression makes involucrin particularly useful for studying epidermal development, epithelial maturation, and formation of the protective cornified barrier.

Involucrin is initially produced as a soluble cytoplasmic protein before becoming incorporated into the developing cornified cell envelope. During terminal differentiation, transglutaminases catalyze covalent crosslinking of involucrin with other structural proteins and lipids near the inner surface of the plasma membrane. Involucrin therefore contributes to the insoluble protein scaffold that ultimately provides mature corneocytes with mechanical strength and resistance to environmental stress.

A distinctive feature of human involucrin is its glutamine-rich central region containing numerous tandem repeats. These residues provide substrates for transglutaminase-mediated crosslinking and contribute to the unusual biochemical behavior of the protein. Although human involucrin has a calculated molecular weight of approximately 68 kDa, it commonly migrates at a substantially higher apparent molecular weight during SDS-PAGE. This anomalous electrophoretic mobility is associated with its unusual repetitive amino acid composition and is an important consideration when interpreting experiments involving a Recombinant Involucrin Antibody.

IVL expression is closely linked to the differentiation state of epithelial cells. In normal stratified squamous epithelium, involucrin expression generally increases as keratinocytes undergo maturation and acquire the specialized properties necessary for barrier formation. Alterations in involucrin expression have consequently been investigated in disorders of epidermal differentiation, hyperproliferative conditions, and neoplastic transformation of squamous epithelia. It is also commonly studied in experimental models examining the transition from proliferating keratinocytes to terminally differentiated cells.

Clone ABEA-9 is a recombinant rabbit monoclonal antibody directed against involucrin. The recombinant format provides a defined antibody sequence and supports consistent reagent production for ongoing research. A Recombinant Involucrin Antibody such as clone ABEA-9 provides a defined monoclonal reagent for investigating involucrin expression and epithelial differentiation, while an IVL Rabbit Monoclonal Antibody provides gene-based terminology for studies of keratinocyte maturation and cornified envelope biology.

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

Application Notes

Optimal dilution of the Recombinant Involucrin Antibody ABEA-9 should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Involucrin / IVL was used as the immunogen for the Recombinant Involucrin Antibody ABEA-9.

Storage

Store the Recombinant Involucrin Antibody ABEA-9 at -20oC.

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