

Transglutaminase-3 (TG3) Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 90022 (clone C2D)
Format: 100ug, Protein A-purified, lyophilized, 0.1M Tris, 0.1M glycine, 2% sucrose, 1mg/ml.

BACKGROUND

Transglutaminase-3 (TG3), an epidermal-type enzyme, is responsible for formation of the epidermis. During keratinocyte differentiation, TG1 and TG3 appear to act cooperatively in the cross-linking of proteins, including involucrin, loricrin and small proline-rich proteins (SPRs). These reactions result in formation of the cornified envelope (CE), a specialized component consisting of covalent cross-links of proteins beneath the plasma membrane of terminally differentiated keratinocytes. Furthermore, TG3 in hair follicles is involved in cross-linking structural proteins such as trichohyalin and keratin intermediate to hardening the inner root sheath. During differentiation in these processes, a zymogen form of TG3 (77 kDa) is activated by limited proteolysis with cathepsins S and/or L.

SPECIFICATION SUMMARY

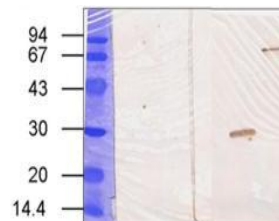
Antigen: Recombinant human TG3 (accession no. Q08188).
Host species: Mouse.
Antibody Class: IgG1.
Preservative: None.

SPECIFICITY

This antibody recognizes full-length human TG3 (77kDa) and the proteolysed form of human TG3 (30-47kDa).

APPLICATIONS

Immunoblotting: use at 1-5ug/ml. Bands of ~77kDa and ~30kDa are detected.



Detection of full-length and proteolysed TG3 in lysate of human epidermal cells with #90022.

Immunocytochemistry: use at 2-10ug/ml.



Detection of TG3 in human foreskin with #90022.

These are recommended concentrations. Enduser should determine optimal concentrations for their applications.

RECONSTITUTION

Reconstitute in distilled water.

STORAGE AND STABILITY

This product is stable for at least one (1) year at -20°C to -70°C. Reconstituted product should be stored in appropriate aliquots to avoid repeated freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.