



Anti-human Lactase-like Protein/LCTL Antibody

ORDERING INFORMATION

Catalog Number: AF5984

Lot Number: CDJX01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

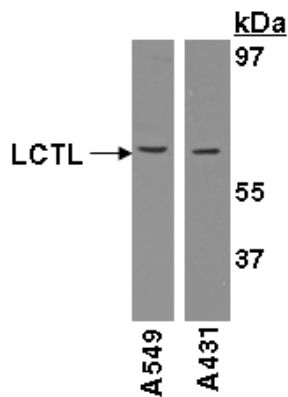
Reconstitution: sterile PBS

Specificity: human LCTL extracellular domain

Immunogen: CHO cell-derived rhLCTL extracellular domain

Ig Type: goat IgG

Applications: Western blot
Immunoprecipitation
Direct ELISA



Detection of LCTL with AF5984.

Cell lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL goat anti-hLCTL.

Background

LCTL (also Lactase-like Protein and Klotho/lactase-phlorizin hydrolase-related protein/KLPH) is a 62 kDa (predicted) member of the glycosyl hydrolase 1 family of proteins. It is expressed in skin and kidney, and may participate in endocrine FGF19 subfamily signaling pathways. Mature human LCTL is a 546 amino acid (aa) type I transmembrane protein that appears to be present in the ER. It contains an apparently nonfunctional glycosidase domain (aa 33 - 503), plus a very short five aa cytoplasmic segment that may function as an ER-retention signal. There is one potential alternative start site at Met174. Over aa 23 - 541, human LCTL shares 86% aa identity with mouse LCTL.

Preparation

Produced in goats immunized with purified, CHO cell-derived, recombinant human Lactase-like Protein/LCTL (rhLCTL; aa 23 - 541; Accession # Q6UWM7). Human LCTL specific IgG was purified by human LCTL affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human LCTL in direct ELISAs and Western blots. In direct ELISAs, this antibody shows approximately 50% cross-reactivity with mLCTL.

Applications

Western blot - An antibody concentration of 1.0 µg/mL is recommended.

Immunoprecipitation - This antibody has been used to immunoprecipitate rhLCTL from conditioned media of transfected CHO cells.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human LCTL. The detection limit for rhLCTL is approximately 0.5 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

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