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(21) International Application Number: PCT/CA97/00880 (22) International Filing Date: 18 November 1997 (18.11.97) (30) Priority Data: 08/746,883 18 November 1996 (18.11.96) US (71) Applicant (for all designated States except US): THE WELLESLEY HOSPITAL FOUNDATION [CA/CA]; 160 Wellesley Street East, Toronto, Ontario M4Y 1J3 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): JULIUS, Michael, H. [CA/CA]; 38 Earl Street, Townhouse #9, Toronto, Ontario M4Y 1M3 (CA). FILIPP, Dominik [SK/CA]; 704 - 15 Dundonald Street, Toronto, Ontario M5Y 1K4 (CA). AL- IZADEBH-KHIAVI, Kamel [IR/CA]; 618 - 1201 Richmond Street, London, Ontario N6A 3L6 (CA). (74) Agent: HUNT, John, C.; Blake, Cassels & Graydon, Box 25, Commerce Court West, Toronto, Ontario M5L 1A9 (CA).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: BOVINE LACTATION ASSOCIATED IMMUNOTROPIC PROTEIN (CD14), ENCODING GENE AND APPLICATION IN B CELL ACTIVATION		
(57) Abstract A novel protein purified from bovine colostral whey and isolated nucleotide sequences encoding the protein is identified. The isolated bovine protein is termed Bovine Lactation Associated Immunotropic (Bo-LAIT) protein. The human homologue of Bo-LAIT protein, Hu-LAIT protein, is also described. A method of activating B cells, and particularly of activating B cells in a mammal, such as a human, in need of such activation by administering LAIT protein is described. LAIT protein can be incorporated into infant formula. LAIT protein can be administered to an infant, as by feeding to the infant such formula. LAIT protein can be incorporated as part of a vaccination. LAIT protein can be administered to a patient having a T cell immune deficiency, for example, a particular T cell dysfunction in which gp39 (CD40L) is under expressed on or totally absent from the cell surface of patient T cells. Preparation of medicaments including LAIT protein for activating B cells in a mammal in need of such activation is described. Natural or recombinant LAIT protein can be used.		