FabGennix International, Inc.
9191 Kyser Way Bldg. 4 Suite 402
Frisco, TX 75033

Tel: (214)-387-8105, 1-800-786-1236 Fax: (214)-387-8105 Email: info@fabgennix.com Web: www.FabGennix.com

Rabbit Polyclonal Anti-Human Lactoferrin antibody

Catalog Number: HLAC-101AP Lot Number:

General Information

Product	Human Lactoferrin Antibody
Accession #	Uniprot: P02788 GenBank: AAA59511
Verified Applications	CM, ELISA, ICC, IF, IHC, IP, WB
Species Cross Reactivity	Human
Host	Rabbit
Immunogen	Human Lactoferrin protein.
Alternative Nomenclature	CKRX antibody, GIG12 antibody, HLF2 antibody, Homo sapiens chemokine receptor X antibody, Kaliocin 1 antibody, Lactoferroxin A antibody, Lactoferroxin B antibody, Lactoferroxin C antibody, Lactoferroxin-C antibody, LTF antibody, Talalactoferrin antibody

Physical Properties

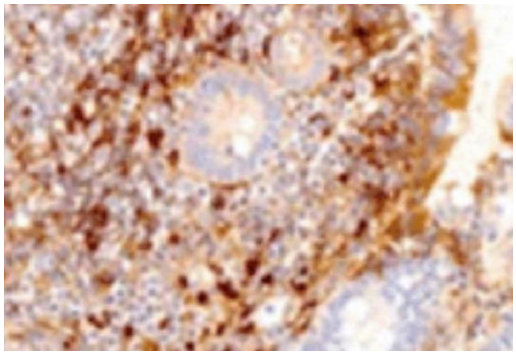
Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.8 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20ºC for long term storage.

Recommended Dilutions

DOT Blot	1:10,000
ELISA	1:10,000
Immunocytochemistry	1:200
Immunofluorescence	1:200
Immunohistochemistry	1:200
Immunoprecipitation	1:200
Western Blot	1:500

Related Products	Catalog #
FITC-Conjugated	HLAC-FITC
Antigenic Blocking Peptide	P-HLAC
Western Blot Positive Control	PC-HLAC
Bovine Lactoferrin	BLAC-101AP

Application Verification:



Human intestine with inflammatory infiltrate section and HLAC-101AP. 1:150 antibody dilution.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

Overview:

Lactoferrin is an iron-binding glycoprotein with an approximate molecular weight of 80 kDa. The protein has two iron binding domains each housing one Fe^{3+} and the synergistic CO_3^{2-} ion (1). The crystal structure of the differic form of human Lactoferrin at 2.2A resolution exhibit 5330 protein atoms, $2Fe^{2+}$, $2CO_3^{2-}$ and 98 carbohydrate atoms (1). Lactoferrin is absorbed from intestine by apical; side of the membrane and localized to the nuclei (2). Anti-lactoferrin antibodies were detected in some patients with rheumatoid arthritis, systemic lupus erythematousus and other muscle diseases (3). Intravenous infusion of Lactoferrin is also protective against lethal dose of E. coli induce bacterimia by a mechanism that down regulates neutrophil TNF alpha secretion (4). Recombinant human lactoferrin (rhLF), expressed and extracted from rice seed, is being evaluated for use as a dietary supplement to treat iron deficiency and/or iron deficiency-induced anemia. Lactoferrin has been shown to have a role in immune system and in early development of embryo. A specific receptor for Lactoferrin binding has been implicated in human fetal intestine (5). Early embryonic localization of Lactoferrin by IHC has suggested its presence in various tissues including intestinal epithelium, kidney, and various regions of the brain.
FabGennix has produced affinity purified antibodies to human (HLAC-101AP) and bovine (BLAC-101AP) Lactoferrin proteins. These antibodies are generated in rabbit using purified human or bovine Lactoferrin proteins. The Lactoferrin antibodies were then affinity purified using immobilized antigenic proteins and pre-adsorbed on an immobilized heterologous Lactoferrin matrix to remove the cross-reacting antibodies. Blocking protein is also available, please inquire to order. FabGennix also provides western blot positive controls for antibodies in ready-to-use buffer for easy identification of respective proteins. Antibodies can be labeled with secondary enzymes or fluorophores, please inquire for more information.

References

1. Sharma AK. Purification, crystallization and preliminary crystallographic analysis of mare lactoferrin. Acta Crystallogr D Biol Crystallogr. 1996 Nov;52(Pt 6):1196-8.
2. Ashida K, Sasaki H, Suzuki YA, Lonnerdal B. Cellular internalization of lactoferrin in intestinal epithelial cells. Biometals. 2004 Jun;17(3):311-5. Related Articles, Links
3. Haridas M. Structure of human diferric lactoferrin refined at 2.2 A resolution. Acta Crystallogr D Biol Crystallogr. 1995 Sep;51(Pt 5):629-46.
4. Zimecki M, Artym J, Chodaczek G, Kocieba M, Kruzel ML. Protective effects of lactoferrin in Escherichia coli-induced bacteremia in mice: relationship to reduced serum TNF alpha level and increased turnover of neutrophils. Inflamm Res. 2004 Jul;53(7):292-6. Epub 2004 Jun 25.

* For users who may require large amounts of the products listed above, please inquire about bulk material discounts.
This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.