

#### **Goat Anti-FTL Antibody**

Peptide-affinity purified goat antibody Catalog # AF1447a

### **Specification**

## **Goat Anti-FTL Antibody - Product Information**

Application WB, IHC, EIA

Primary Accession P02792

Other Accession NP\_000137, 2512, 14325 (mouse), 29292 (rat)

Reactivity Huma

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype Calculated MW 20020

## **Goat Anti-FTL Antibody - Additional Information**

#### **Gene ID 2512**

#### **Other Names**

Ferritin light chain, Ferritin L subunit, FTL

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-FTL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-FTL Antibody - Protein Information**

# Name FTL

#### **Function**

Stores iron in a soluble, non-toxic, readily available form. Important for iron homeostasis. Iron is taken up in the ferrous form and deposited as ferric hydroxides after oxidation. Also plays a role in delivery of iron to cells. Mediates iron uptake in capsule cells of the developing kidney (By similarity). Delivery to lysosomes by the cargo receptor NCOA4 for autophagic degradation and release or iron (PubMed:<a href="http://www.uniprot.org/citations/24695223" target="\_blank">24695223</a>).



### **Cellular Location**

Cytoplasmic vesicle, autophagosome. Cytoplasm {ECO:0000250|UniProtKB:P29391}. Autolysosome {ECO:0000250|UniProtKB:P29391}

### **Goat Anti-FTL Antibody - Protocols**

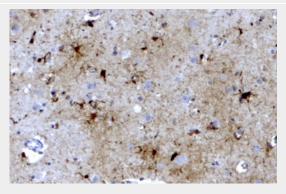
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-FTL Antibody - Images

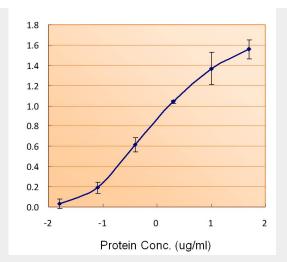


AF1447a (0.05  $\mu$ g/ml) staining of Human Placenta lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1447a (3.8  $\mu$ g/ml) staining of paraffin embedded Human Brain Cortex. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.





AF1447a (1.5ug/ml) as the reporter with EB002025 as the capture rabbit antibody (5ug/ml).

## **Goat Anti-FTL Antibody - Background**

This gene encodes the light subunit of the ferritin protein. Ferritin is the major intracellular iron storage protein in prokaryotes and eukaryotes. It is composed of 24 subunits of the heavy and light ferritin chains. Variation in ferritin subunit composition may affect the rates of iron uptake and release in different tissues. A major function of ferritin is the storage of iron in a soluble and nontoxic state. Defects in this light chain ferritin gene are associated with several neurodegenerative diseases and hyperferritinemia-cataract syndrome. This gene has multiple pseudogenes.

### **Goat Anti-FTL Antibody - References**

Genetic variation and antioxidant response gene expression in the bronchial airway epithelium of smokers at risk for lung cancer. Wang X, et al. PLoS One, 2010 Aug 3. PMID 20689807. Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Sex-specific proteome differences in the anterior cingulate cortex of schizophrenia.

Martins-de-Souza D, et al. J Psychiatr Res, 2010 Apr 8. PMID 20381070.

Toluene diisocyanate (TDI) regulates haem oxygenase-1/ferritin expression: implications for toluene diisocyanate-induced asthma. Kim SH, et al. Clin Exp Immunol, 2010 Jun. PMID 20345975.

Mutant ferritin L-chains that cause neurodegeneration act in a dominant-negative manner to reduce ferritin iron incorporation. Luscieti S, et al. J Biol Chem, 2010 Apr 16. PMID 20159981.