

For Research Use Only

LACTB Monoclonal antibody

Catalog Number: 66785-1-Ig **3 Publications**



Basic Information

| | | |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------|
| Catalog Number: 66785-1-Ig | GenBank Accession Number: BC067288 | Purification Method: Protein G purification |
| Size: 150ul , Concentration: 1600 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard; | GeneID (NCBI): 114294 | CloneNo.: 3C3C3 |
| Source: Mouse | Full Name: lactamase, beta | Recommended Dilutions: WB 1:1000-1:6000 IHC 1:150-1:600 IF 1:50-1:500 |
| Isotype: IgG1 | Calculated MW: 547 aa, 61 kDa | |
| Immunogen Catalog Number: AG12233 | Observed MW: 50-60 kDa | |

Applications

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Tested Applications: IF, IHC, WB, ELISA | Positive Controls: WB : HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells IHC : human liver cancer tissue, IF : HepG2 cells, |
| Cited Applications: IF, IHC, WB | |
| Species Specificity: Human | |
| Cited Species: human, mouse | |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

Background Information

LACTB is also named as MRPL56, which is a component of the large subunit of the mitochondrial ribosome that is encoded by the nuclear genome. LACTB is a mammalian active-site serine protein that has evolved from a bacterial penicillin-binding protein. It promotes intramitochondrial membrane organization and micro-compartmentalization through polymerization (PMID:19858488). Northern blot analysis of mouse tissues detected expression at high levels in liver, heart, and skeletal muscle, with lower levels in kidney, testis, brain, lung, and spleen (PMID:11707067). The full-length of LACTB is about 61kDa, and a 115aa transit peptide can be removed in the mature form.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|---------------|-----------|------------------|-------------|
| Chunxiao Wang | 33273855 | Cancer Manag Res | WB |
| Yawen Ma | 33675985 | Cancer Lett | WB, IHC, IF |
| Wenhao Ma | 38176415 | Mol Cell | WB |

Storage

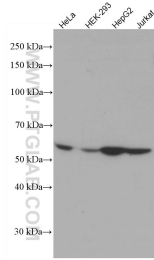
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

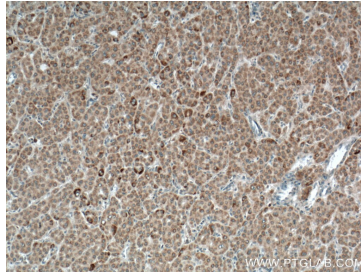
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

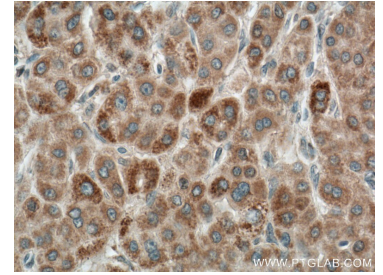
Selected Validation Data



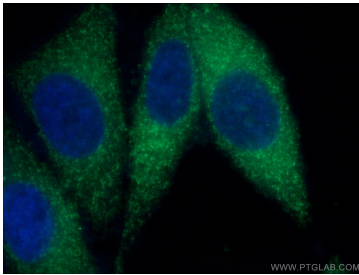
Various lysates were subjected to SDS PAGE followed by western blot with 66785-1-Ig (LACTB antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66785-1-Ig (LACTB antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66785-1-Ig (LACTB antibody) at dilution of 1:300 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66785-1-Ig (LACTB antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).