


Product datasheet

Anti-FHL1 antibody ab49241

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Overview

Product name	Anti-FHL1 antibody
Description	Rabbit polyclonal to FHL1
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Sheep, Rabbit, Horse, Guinea pig, Cow, Cat, Dog, Pig 
Immunogen	A region within synthetic peptide: VAKKCAGCKN PITGFGKGSS VVAYEGQSWH DYCFHCKKCS VNLANKRFVF, corresponding to C terminal amino acids 217-266 of Human FHL1 Run BLAST with ExPASy Run BLAST with NCBI
Positive control	WB: Fetal muscle lysate. IHC-P: Human kidney epithelial cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 2% Sucrose, PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab49241** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

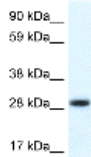
Application	Abreviews	Notes
WB		Use a concentration of 0.1 µg/ml. Detects a band of approximately 30 kDa (predicted molecular weight: 32 kDa). Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.

Application	Abreviews	Notes
IHC-P		Use a concentration of 4 - 8 µg/ml.
ICC/IF		Use a concentration of 1 µg/ml.

Target

Function	May have an involvement in muscle development or hypertrophy.
Tissue specificity	Isoform 1 is highly expressed in skeletal muscle and to a lesser extent in heart, placenta, ovary, prostate, testis, small intestine, colon and spleen. Expression is barely detectable in brain, lung, liver, kidney, pancreas, thymus and peripheral blood leukocytes. Isoform 2 is expressed in brain, skeletal muscle and to a lesser extent in heart, colon, prostate and small intestine. Isoform 3 is expressed in testis, heart and skeletal muscle.
Involvement in disease	<p>Defects in FHL1 are the cause of X-linked dominant scapuloperoneal myopathy (SPM) [MIM:300695]. Scapuloperoneal syndrome (SPS) was initially described more than 120 years ago by Jules Broussard as 'une forme hereditaire d'atrophie musculaire progressive' beginning in the lower legs and affecting the shoulder region earlier and more severely than distal arm. The etiology of this condition remains unclear.</p> <p>Defects in FHL1 are the cause of X-linked myopathy with postural muscle atrophy (XMPMA) [MIM:300696]. Myopathies are inherited muscle disorders characterized by weakness and atrophy of voluntary skeletal muscle, and several types of myopathy also show involvement of cardiac muscle. XMPMA is a distinct form of adult-onset X-linked recessive myopathy with several features in common with other myopathies, but the presentation of a pseudoathletic phenotype, scapuloperoneal weakness, and bent spine is unique and might render the clinical phenotype distinguishable from other myopathies.</p> <p>Defects in FHL1 are the cause of X-linked severe early-onset reducing body myopathy (RBM) [MIM:300717]. RBM is a rare muscle disorder causing progressive muscular weakness and characteristic intracytoplasmic inclusions in myofibers. Clinical presentations of RBM have ranged from early onset fatal to childhood onset to adult onset cases.</p> <p>Defects in FHL1 are the cause of X-linked childhood-onset reducing body myopathy (CO-RBM) [MIM:300718]. This disorder is allelic to severe early-onset reducing body myopathy (RBM) [MIM:300717].</p>
Sequence similarities	Contains 3 LIM zinc-binding domains.
Developmental stage	Elevated levels during postnatal muscle growth.
Cellular localization	Cytoplasm; Cytoplasm. Nucleus and Nucleus. Cytoplasm > cytosol. Predominantly nuclear in myoblasts but is cytosolic in differentiated myotubes.

Images



90 kDa
59 kDa
38 kDa
28 kDa
17 kDa

Western blot - Anti-FHL1 antibody (ab49241)

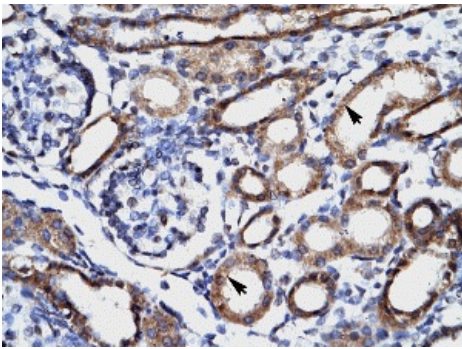
Anti-FHL1 antibody (ab49241) at 0.1 µg/ml +
Fetal muscle lysate at 10 µg

Secondary

HRP conjugated anti-Rabbit IgG at 1/50000
dilution

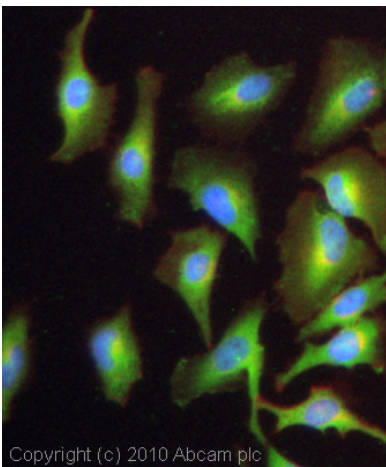
Predicted band size : 32 kDa

Observed band size : 30 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-FHL1 antibody (ab49241)

Immunohistochemistry (Formalin/PFA-fixed
paraffin-embedded sections) analysis of
human kidney tissue labelling FHL1 with
ab49241 at 4-8µg/ml. Arrows indicate
positively labelled epithelial renal tubule cells.
Magnification: 400X.



Immunocytochemistry/ Immunofluorescence - Anti-
FHL1 antibody (ab49241)

ICC/IF image of ab49241 stained HeLa cells.
The cells were 4% formaldehyde fixed (10
min) and then incubated in 1%BSA / 10%
normal goat serum / 0.3M glycine in 0.1%
PBS-Tween for 1h to permeabilise the cells
and block non-specific protein-protein
interactions. The cells were then incubated
with the antibody (ab49241, 1 µg/ml) overnight
at +4°C. The secondary antibody (green) was
Alexa Fluor® 488 goat anti-rabbit IgG (H+L)
used at a 1/1000 dilution for 1h. Alexa Fluor®
594 WGA was used to label plasma
membranes (red) at a 1/200 dilution for 1h.
DAPI was used to stain the cell nuclei (blue) at
a concentration of 1.43µM.

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