

Anti-CHI3L1 Picoband Antibody

Catalog # ABO12938

Product Information

Application	WB, E
Primary Accession	Chi3l1: Q61362
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for CHI3L1 detection. Tested with WB, Direct ELISA in Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Application Details	Western blot, 0.1-0.5 µg/ml Direct ELISA, 0.1-0.5 µg/ml
Subcellular Localization	Secreted, extracellular space. Cytoplasm. Endoplasmic reticulum. Detected in bronchoalveolar lavage (BAL) fluids. Localizes mainly to endoplasmic reticulum when overexpressed in cells, with some protein also detected throughout the cytoplasm.
Tissue Specificity	Detected in lung in pulmonary macrophages and alveolar type 2 cells and in bronchoalveolar lavage (BAL) fluids. Expressed in mammary tumor cells (at protein level). Expressed in lung. Not detected in non-inflammatory colon.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived mouse CHI3L1 recombinant protein (Position: Y30-K262).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Protein Information

Background

Chitinase-3-like protein 1 (CHI3L1), also known as YKL-40, is a secreted glycoprotein that is approximately 40kDa in size that in humans is encoded by the CHI3L1 gene. This gene is mapped to 1q32.1. Chitinases catalyze the hydrolysis of chitin, which is an abundant glycopolymer found in insect exoskeletons and fungal cell walls. The glycoside hydrolase 18 family of chitinases includes eight human family members. This gene encodes a glycoprotein member of the glycosyl hydrolase 18 family. The protein lacks chitinase activity and is secreted by activated macrophages, chondrocytes, neutrophils and synovial cells. The protein is thought to play a role in the process of inflammation and tissue remodeling.

Images

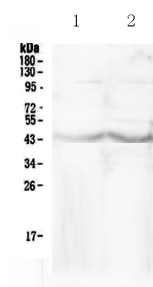


Figure 1. Western blot analysis of CHI3L1 using anti-CHI3L1 antibody (ABO12938). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse RAW264.7 whole cell lysates, Lane 2: mouse HEPA1-6 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CHI3L1 antigen affinity purified polyclonal antibody (Catalog # ABO12938) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CHI3L1 at approximately 43KD. The expected band size for CHI3L1 is at 43KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.