

Anti-Milk Fat Globule 1/MFGE8 Antibody Picoband™

Catalog Number: A02518-2

About MFGE8

MFGE8(Milk Fat Globule-Egf Factor 8), also called as Lactadherin or SED1, is a protein which in humans is encoded by the MFGE8 gene. Mfge8 is secreted protein found in vertebrates, including mammals as well as birds. By fluorescence in situ hybridization, Collins et al.(1997) mapped the MFGE8 gene to chromosome 15q25. Hanayama et al.(2002) found that MFGE8 is a factor that links apoptotic cells to phagocytes. MFGE8 specifically bound to apoptotic cells by recognizing aminophospholipids such as phosphatidylserine. MFGE8, when engaged by phospholipids, bound to cells via its RGD motif. It bound particularly strongly to cells expressing alpha-V-beta-3 integrin. Bu et al.(2007) showed that Mfge8 was expressed in intestinal lamina propria macrophages in mice. Using a wound-healing assay, they showed that Mfge8 promoted migration of intestinal epithelial cells through a PKC-epsilon(PRKCE)-dependent mechanism.

Overview

Product Name	Anti-Milk Fat Globule 1/MFGE8 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Milk Fat Globule 1/MFGE8 Antibody Picoband™ catalog # A02518-2. Tested in IHC, WB applications. This antibody reacts with Human.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q08431

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Milk Fat Globule 1/MFGE8, which shares 70.6% amino acid (aa) sequence identity with mouse and rat MFGE8.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.25-0.5 µg/ml, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/ml, Human

Anti-Milk Fat Globule 1/MFGE8 Antibody Picoband™ (A02518-2) Images

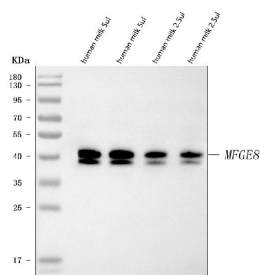


Figure 1. Western blot analysis of Milk Fat Globule 1/MFGE8 using anti-Milk Fat Globule 1/MFGE8 antibody (A02518-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human milk 5 ul,
Lane 2: human milk 5 ul,
Lane 3: human milk 2.5 ul,
Lane 4: human milk 2.5 ul.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-Milk Fat Globule 1/MFGE8 antigen affinity purified polyclonal antibody (Catalog # A02518-2) 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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Milk Fat Globule 1/MFGE8 at approximately 43 kDa. The expected band size for Milk Fat Globule 1/MFGE8 is at 43 kDa.

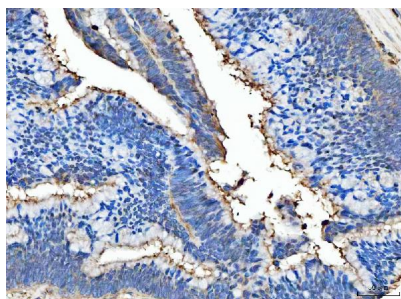


Figure 2. IHC analysis of Milk Fat Globule 1/MFGE8 using anti-Milk Fat Globule 1/MFGE8 antibody (A02518-2).

Milk Fat Globule 1/MFGE8 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Milk Fat Globule 1/MFGE8 Antibody (A02518-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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