

## **Product datasheet for TA399813**

## **BSG Mouse Monoclonal Antibody [Clone ID: 5F6]**

## **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 5F6

**Applications:** Bl, ELISA, Inhib

Reactivity: Human Host: Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

**Immunogen:** The original antibody was generated by immunizing mice with CD147.

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Specificity:

The antibody binds the N domain of CD147. The antibody binds to an epitope on the extracellular domain of CD147 (residues Asp65-Phe74 and Val30-Thr40). CD147 is a type I membrane glycoprotein and is classified into the immunoglobulin-like superfamily, and is expressed in many types of cancer. It is suggested that CD147 is also associated with cancer metastasis, invasion, and chemical drug resistance.

The specificity of the antibody was coonfirmed by competition ELISA. The antibody recognized MDA-MB-231 cells that express native CD147 antigens on tumor cell surface. To assess the ability of the original antibody to block MMP-1 production, NHLF were treated with recombinant a ECD-Flag construct and the MMP-1 production in response to CD147 stimulation was determined using the MMP-1 activity assay. The antibody showed significant inhibition of MMP-1 production. The original antibody was screened for the ability to inhibit CD147-induced MMP-2 or MMP-9 production in co-culture. Results showed the antibody inhibited MMP-2 and MMP-9 production in co-culture. The humanized version of the antibody (IgG1) inhibited CD147-stimulated MMP-1 production by fibroblast in a dosedependent manner and the MMP-2 production by MDA-MB-231 and NHDF in a dose dependent manner. The humanized version of the antibody was able to inhibit VEGF production by normal human lung fibroblasts (NHLF) stimulated with 10 μg/ml recombinant CD147 for 48 hours. The humanized version of the antibody inhibited more than 40% of VEGF production in co-culture of tumor cells and fibroblast cells. The humanized version of the antibody inhibited angiogenesis in vivo. SCID Beige Mice implanted with MDA-MB-231 human breast carcinoma cells were treated with E+5F6(MulgG2a); the antibody inhibited tumor angiogenesis in Panc-1 matrigel plug model. The antibody showed potential as therapeutic and prophylactic agents (US8618264B2). The structure of the Fab fragment was determined (Teplyakov et al., 2010).

**Formulation:** PBS with 0.02% Proclin 300.

Concentration: lot specific

Conjugation: Unconjugated

Storage: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Database Link: P35613

**Synonyms:** 5F7; Basigin; BSG; Cluster of differentiation 147; Collagenase stimulatory factor; Emmprin;

Extracellular matrix metalloproteinase inducer; HAb18G; Hepatoma-associated antigen; Leukocyte activation antigen M6; OK blood group antigen; TCSF; Tumor cell-derived

collagenase stimulatory factor