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KS130	Anti Human CD147(EMMPRIN) Monoclonal Antibody (Clone No.2G2)
Primary Source	HGNC:1116
Type	Monoclonal
Immunogen	human cancer cell line
Raised in	Mouse
Myeloma	P3U1
Clone number	2G2
Isotype	IgG1κ
Source	Serum-free medium
Purification notes	ProteinG
Cross Reactivity	Not yet tested in other species.
Concentration	0.25 mg/mL
Contents（Volume）	50 µg（200 µL/vial）
Label	Unlabeled
Buffer	PBS [containing 2 % Block Ace as a stabilizer, 0.1 %Proclin as a bacteriostat]
Storage	Store below –20 ℃. Once thawed, store at 4 ℃. Repeated freeze-thaw cycles should be avoided.

Application	
WB	Not tested
IHC	Not tested
ICC	Not tested
ELISA	Not tested
FCM	0.5-1.0 µg/mL
Neutralization	Not tested
IP	5.0-10.0 µg/mL

Note

CD147 (also known as Bsg, EMMPRIN) is a 58-kDa transmembrane glycoprotein with two immunoglobulin-like domains and expressed at high levels in many types of tumors and stromal cells. So far, several studies have demonstrated that CD147 plays important role in the progression of malignancies by regulating expression of MMPs (MMP-1, MMP-2, MMP-3, MT-1 MMP) which have important roles in promoting tumor growth, invasion and metastasis. It has been shown that CD147 siRNA inhibited the proliferation, invasiveness, and metastatis activity of human malignant melanoma cell, and that antibody to CD147 inhibit the production of MMPs by fibroblasts and the invasiveness of melanoma cells.
In addition to its ability to stimulate stromal MMPs expression, CD147 also induces VEGF and progresses tumor angiogenesis. It has been also shown that CD147 plays a role in systemic lupus erythematosus.
This antibody is specific to human CD147 and will be useful for FACS and immunoprecipitation.

CD147 (Bsg、EMMPRIN) は、2 つの Ig ドメインを持つ 58 kDa の膜糖タンパク質で、多くの癌細胞や間質細胞で高発現しています。これまでの研究で CD147 は、腫瘍の成長、浸潤、転移などを促進する MMPs (MMP-1, MMP-2, MMP-3, MT-1 MMP) の発現を調節することで、悪性腫瘍の発達に重要な役割を果たすことが明らかとなり、CD147 siRNA による悪性黒色腫の増殖、浸潤、転移の阻害や抗 CD147 抗体によるMMPs 産生及び腫瘍細胞浸潤の阻害なども示されています。また CD147 は VEGF の発現を誘導し、腫瘍の血管新生を促進するほか、全身性エリテマトーデスに関与することも示唆されています。
本抗体はヒトCD147 に特異的な抗体であり、FACS、免疫沈降に使用できます。

Reference

1 Tang Y. et al.: Regulation of vascular endothelial growth factor expression by EMMPRIN via the PI3K-Akt signaling pathway. Mol Cancer Res. 2006 Jun;4(6):371-7.
2 Chen X. et al.: A small interfering CD147-targeting RNA inhibited the proliferation, invasiveness, and metastatic activity of malignant melanoma. Cancer Res. 2006 Dec 1;66(23):11323-30.
3 Egawa N. et al.: Membrane type 1 matrix metalloproteinase (MT1-MMP/MMP-14) cleaves and releases a 22-kDa extracellular matrix metalloproteinase inducer (EMMPRIN) fragment from tumor cells. J Biol Chem. 2006 Dec 8;281(49):37576-85. Epub 2006 Oct 18.
4 Danilo Millimaggi. et al Tumor Vesicle-Associated CD147 Modulates the Angiogenic Capability of Endothelial Cells Neoplasia. 2007 April; 9(4): 349–357.
5 Pistol G. et al.: Roles of CD147 on T lymphocytes activation and MMP-9 secretion in systemic lupus erythematosus. J Cell Mol Med. 2007 Mar-Apr;11(2):339-48.

WARNING AND PRECAUTION

1. Not for diagnostic use. The safety and efficacy of product in diagnostic or other clinical uses has not been established.
2. Harmful by inhalation, in contact with skin and if swallowed. Do not breathe dust. Avoid contact with skin and eyes.
3. If contact with skin and eyes, wash all affected areas with large volume of water. If inhaled remove to fresh air. In severe case obtain medical attention.
4. Wash hand thoroughly after handling the product.
5. Do not use this product if container is broken or some contaminants are detected.
6. When preserving the product, Close the container, ensure it does not fall aside or down.
7. Dispose of the container and expired reagents in accordance with federal, state and local government regulations.
8. Do not use the container and accessories of the product for other purpose.

取り扱い上の注意

この添付文書をよく読んでから使用して下さい。

1. 本品は研究用試薬であり、医薬品その他の目的にはご使用になれません。
2. 取り扱い中は皮膚、粘膜、着衣に触れたり、目に入らないように適切な措置を行って下さい。
3. 試薬が誤って目や口に入った場合には、水で十分に洗い流すなどの応急処置を行い、必要があれば医師の手当を受けて下さい。
4. 取り扱い後には手洗いを十分に行って下さい。
5. 容器の破損、異物混入等異常が認められた物は使用しないで下さい。
6. 試薬を保管する場合は、蓋をし、転倒落下防止を確実にし、指定の貯蔵方法で保管して下さい。
7. 使用後の容器は、廃棄物に関する規定に従って処理して下さい。
8. 容器、付属品等の他目的への転用は保証できません。