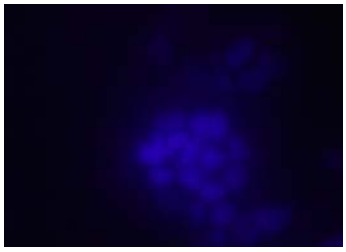
COSMO BIO CO., LTD.
Inspiration for Life Science

KG138	Anti Human GPR120 Monoclonal Antibody (Clone No. 2B6)		
Primary Source	HGNC: 19061	Application	
Type	Monoclonal	WB	Not tested
Immunogen	Partial peptide of Human GPR120	IHC	Not tested
Raised in	GANP mouse	ICC	5.0 µg/mL
Myeloma	P3UI	ELISA	Not tested
Clone number	2B6	FCM	1.0-5.0 µg/mL
Isotype	IgG2aκ	Neutralization	Not tested
Source	Serum-free conditioned medium	IP	Not tested
Purification notes	ProteinG		
Cross Reactivity	Not yet tested in other species.		
Concentration	0.25 mg/mL		
Contents (Volume)	25 µg (100 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.		

GANP
This product is generated from GANP®

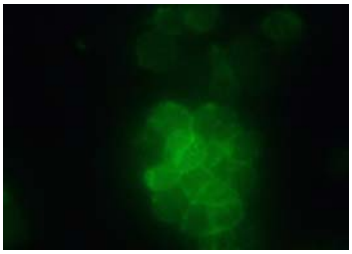
Immunocytochemical staining of HEK293T cells overexpressing human GPR120

DAPI



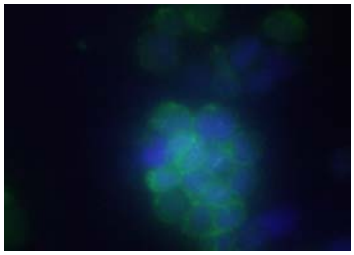
Blue:DAPI

FITC



Green:KG138 (2nd Ab :anti-mIgG FITC-conjugated)

Merge



Note

GPR120 is a member of G protein-coupled receptor (GPCR) family and functions as a specific receptor for unsaturated long-chain free fatty acids (FFAs) such as palmitoleic acid, αlinolenic acid, docosahexaenoic acid. The expression of GPR120 is widely detected in various tissues, and GPR120 is highly expressed in the pituitary, lung, small intestine, colon, and adipose tissues.
It has been shown that the stimulation of GPR120 by FFAs promotes the secretion of GLP-1, known as the most potent insulinotropic incretin, from the gastrointestinal tract. It has been also demonstrated that FFAs stimulate the ERK and PI3K-Akt pathways through GPR120 and lead to anti-apoptotic effect in enteroendocrine cell line, and that GPR120 regulates adipogenic process such as adipocyte development and differentiation. In addition, a study suggested that GPR120 is expressed in the taste bud cells in circumvallate papillae to sense dietary fat.

GPR120 は、Gタンパク質共役型受容体 (GPCR) ファミリーの一つで、パルミトレイン酸、αリノレイン酸、ドコサヘキサエン酸などの長鎖不飽和遊離脂肪酸に特異的な受容体です。GPR120 は生体内で幅広く発現しており、特に下垂体、肺、小腸、結腸、脂肪組織などに多く発現しています。
遊離脂肪酸による GPR120 刺激は、インクレチンとして知られている、GLP-1 の消化管からの分泌を促進することが示されています。また、遊離脂肪酸は GPR120 を介して、ERK 及び PI3K-Akt 経路を活性化し、腸管内分泌細胞においては抗アポトーシス活性を示します。このほか、GPR120 は脂肪細胞発達や分化を促進することが報告され、また GPR120 が舌の味蕾に発現し味覚に関与している可能性も示唆されています。
本抗体は、GPR120 に特異的な抗体であり、糖尿病や肥満の研究などにご利用下さい。

Reference

1 Gotoh C. et al.:	The regulation of adipogenesis through GPR120.	Biochem Biophys Res Commun. 2007 Mar 9;354(2):591-7. Epub 2007 Jan 16
2 Matsumura S. et al.:	GPR expression in the rat taste bud relating to fatty acid sensing.	Biomed Res. 2007 Feb;28(1):49-55
3 Katsuma S. et al.:	Free fatty acids inhibit serum deprivation-induced apoptosis through GPR120 in a murine enteroendocrine cell line STC-1.	J Biol Chem. 2005 May 20;280(20):19507-15. Epub 2005 Mar 17
4 Hirasawa A. et al.:	Free fatty acids regulate gut incretin glucagon-like peptide-1 secretion through GPR120.	Nat Med. 2005 Jan;11(1):90-4. Epub 2004 Dec 26

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。

Manufactured by Trans Genic Inc.

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