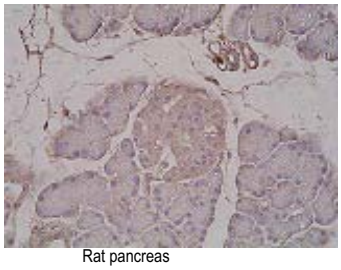
COSMO BIO CO., LTD.
Inspiration for Life Science

| KX411 | Anti Human FFAR2 Monoclonal Antibody (Clone No. 20D2) | | |
|---|---|---|---|
| Primary Source | HGNC: 4501 | Gene ID | 2867 |
| Type | Monoclonal | Keyword | |
| Immunogen | Partial peptide of human FFAR2 | free fatty acid receptor 2<br>FFA2R; GPR43 | |
| Raised in | GANP mouse | | |
| Myeloma | P3U1 | | |
| Clone number | 20D2 | | |
| Isotype | IgG2b,κ | | |
| Source | Serum-free medium | Application | |
| Purification notes | ProteinG | WB | Not tested |
| Cross Reactivity | Rat | IHC | 5.0 μg/mL |
| Concentration | 0.25 mg/mL | ICC | Not tested |
| Contents (Volume) | 50 μg (200 μL/vial) | ELISA | 1.0 μg/mL |
| Label | Unlabeled | FCM | Not tested |
| Buffer | PBS [containing 2 % Block Ace as a stabilizer, 0.1 %Proclin as a bacteriostat] | Neutralization | Not tested |
| Storage | Store below –20 ℃. Once thawed, store at 4 ℃. Repeated freeze-thaw cycles should be avoided. | IP | Not tested |


Rat large intestine


Rat pancreas

GANP
This product is generated from GANP®

Note

FFAR2 (free fatty acid receptor 2), also known as GPR43, is a member of G protein-coupled receptor and has been identified as a receptor for short-chain fatty acids that include acetate and propionate. GPR43 is predominantly expressed in peripheral blood leukocytes and, to a lesser extent, in spleen, suggesting that GPR43 may play a role in various immune and inflammatory responses. GPR43 is also expressed in a number of other tissues including adipocytes. GPR43 has an important role in adipogenesis and the development of adipose tissues. A study by using GPR43-deficienct mice shows that activation of GPR43 in adypocytes leads to inhibition of lipolysis and results in the reduction of plasma free fatty acids level in vivo.

Note

FFAR2 (別名 : GPR43) は、G タンパク質共役型受容体 (GPCR) の一つで、酢酸やプロピオン酸といった短鎖脂肪酸の受容体として同定されました。GPR43 は主に末梢血リンパ球や脾臓に発現していることから、免疫や炎症反応に関与することが想定されています。また GPR43 は脂肪細胞にも発現しており、脂肪生成や脂肪組織の発達に重要な役割を果たしています。GPR43 欠損マウスを用いた研究では、脂肪細胞における GPR43 活性が脂肪生成を阻害し、血液中の遊離脂肪酸を減少させることが示されています。

Reference


1 Nilsson NE. et al.: Identification of a free fatty acid receptor, FFA2R, expressed on leukocytes and activated by short-chain fatty acids. Biochem Biophys Res Commun. 2003 Apr 18;303(4):1047-52.

2 Hong YH. et al: Acetate and propionate short chain fatty acids stimulate adipogenesis via GPCR43. Endocrinology 2005 Dec;146(12):5092-9. Epub 2005 Aug 25.

3 Ge H. et al: Activation of G protein-coupled receptor 43 in adipocytes leads to inhibition of lipolysis and suppression of plasma free fatty acids. Endocrinology 2008 Sep;149(9):4519-26. Epub 2008 May 22.


**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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