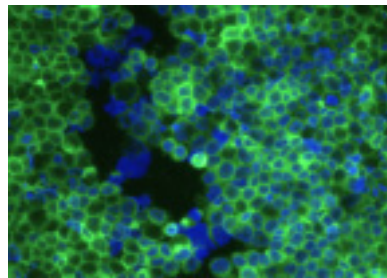


KG139 Anti Human KOR Monoclonal Antibody (Clone No. 5E3)		Application	
Primary Source	HGNC: 8154	WB	5.0 µg/mL
Type	Monoclonal	IHC	Not tested
Immunogen	hKOR expressing cell line	ICC	1.0 µg/mL
Raised in	Mouse	ELISA	Not tested
Myeloma	P3UI	FCM	1.0 µg/mL
Clone number	5E3	Neutralization	Not tested
Isotype	IgG1 κ	IP	5.0 µg/mL
Source	Serum-free medium		
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 °C. Once thawed, store at 4 °C. Repeated freeze-thaw cycles should be avoided.		



Blue: DAPI  
Green: KG139 (2<sup>nd</sup> Ab :anti-mIgG FITC-conjugated)  
Immunocytochemical staining of HEK293T cells overexpressing human KOR

#### Note

OPRK1 (opioid receptor, kappa 1), also known as KOR, belongs to the rhodopsin subfamily of G-protein-coupled receptor (GPCR) family. OPRK1 is consist of 380 amino acids and is widely expressed in the nervous system. OPRK1 is activated by endogenous opioid peptide agonists derived from prodynorphin. Stimulation of OPRK1 in vivo produces many effects, including analgesia, water diuresis, dysphoria, antipruritic effects, and attenuation of cocaine craving in addicts. In addition, some studies reported that OPRK1 is associated with alcohol intake and the risk for alcohol dependence and activation of OPRK1 in human microglia suppresses HIV-1 expression.

OPRK1 (opioid receptor, kappa 1 : 別名 KOR) は、Gタンパク質共役型受容体 (GPCR) ファミリーに属するロドプシンサブファミリーの一つです。OPRK1 は、380 アミノ酸残基から成り、神経系に幅広く発現しています。OPRK1 は、内因性オピオイドのダイノルフィン類によって活性化されます。OPRK1 への刺激は、鎮痛、利尿、不快感、鎮痒、薬物耽溺などに作用します。また、OPRK1 と飲酒やアルコール依存症との関連性が指摘されているほか、HIV-1 に感染したマイクログリアにおいては、OPRK1 刺激により HIV-1 の発現が阻害されることが示されています。

#### Reference

- |                        |   |   |
|------------------------|---|---|
| 1 Simonin F. et al.:   | kappa-Opioid receptor in humans: cDNA and genomic cloning, chromosomal assignment, function expression, pharmacology, and expression pattern in the central nervous systerr                                       | Proc Natl Acad Sci U S A.<br>1995 Jul 18;92(15):7006-10.      |
| 2 Chao CC. et al.:     | kappa opioid receptors in human microglia downregulate human immunodeficiency virus 1 expression.   | Proc Natl Acad Sci U S A.<br>1996 Jul 23;93(15):8051-6.       |
| 3 Edenberg HJ. et al.: | A regulatory variation in OPRK1, the gene encoding the kappa-opioid receptor, is associated with alcohol dependence.  | Hum Mol Genet.<br>2008 Jun 15;17(12):1783-9. Epub 2008 Mar 4. |
| 4 Simonin F. et al.    | Disruption of the kappa-opioid receptor gene in mice enhances sensitivity to chemical visceral pain, impairs pharmacological actions of the selective kappa-agonist U-50,488H and attenuates morphine withdrawal. | EMBO J.<br>1998 Feb 16;17(4):886-97.                          |

#### WARNING AND PRECAUTION

- Not for diagnostic use. The safety and efficacy of product in diagnostic or other clinical uses has not been established.
- Harmful by inhalation, in contact with skin and if swallowed. Do not breathe dust. Avoid contact with skin and eyes.
- 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.
- Wash hand thoroughly after handling the product.
- Do not use this product if container is broken or some contaminants are detected.
- When preserving the product, Close the container, ensure it does not fall aside or down.
- Dispose of the container and expired reagents in accordance with federal, state and local government regulations.
- 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。

- 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。
- 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。
- 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。
- 取り扱い後には手洗いを十分に行って下さい。
- 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。
- 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。
- 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。
- 容器、付属品等の他目的への転用は保証できません。