

**Rabbit Anti-CXCR4/CD184 [MD45R]: RM0407, RM0407RTU7**

**Intended Use:** For Research Use Only

**Description:** The C-X-C or a chemokine family is characterized by a pair of cysteine residues separated by a single amino acid and primarily functions as chemoattractants for neutrophils. The C-X-C family includes IL-8, NAP-2, MSGA and stromal cell derived factor-1 (SDF-1). SDF-1 was originally described as a pre-B cell stimulatory factor, but has now been shown to function as a potent chemo-attractant for T cells and monocytes but not neutrophils. Receptors for the C-X-C family are G protein-coupled, seven pass transmembrane domain proteins which include IL-8RA, IL-8RB and CXCR4 (also known as LESTR or fusin). CXCR4 is highly homologous to the IL-8 receptors, sharing 37% sequence identity at the amino acid level. The IL-8 receptors bind to IL-8, NAP-2 and MSGA, while fusin binds to its cognate ligand, SDF-1. CXCR4 has been identified as the major co-receptor for T-tropic HIV-1 and SDF-1 has been shown to inhibit HIV-1 infection.

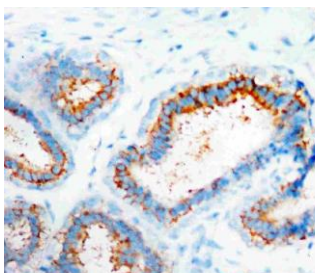
**Specifications:**

Clone: MD45R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse  
 Immunogen: Synthesized peptide of human CXCR4  
 Localization: Membrane  
 Formulation: Antibody in PBS 7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
CXCR4/CD184 Concentrated	RM0407	1 ml
CXCR4/CD184 Prediluted	RM0407RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Cervical ca, ovarian adenoca, tonsil  
 Concentrated Dilution: 25-100  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: Overnight at 4°C  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human breast cancer stained with anti-CXCR4 using DAB

**References:**

1. Radiation-induced pulmonary injury accelerated pulmonary metastasis in a mouse model of breast cancer. Gong H, et al. *Oncol Lett* 10:3613-3618, 2015.
2. CXCR4, CXCL12 and the relative CXCL12-CXCR4 expression as prognostic factors in colon cancer. Stanislavljevic , et al. *Tumour Biol*, 2015.
3. CXCR4: A Potential Marker for Inflammatory Activity in Abdominal Aortic Aneurysm Wall. Tanios, et al. *Eur J Vasc Endovasc Surg* 50:745-53, 2015.