10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Anti-CXCR4 (Ser-324/Ser-325), Phosphospecific Antibody

Catalog # AN1737

## Product Information

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| **Application** | WB, IHC, ICC |
| **Primary Accession** | P61073 |
| **Host** | Rabbit |
| **Clonality** | Rabbit Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 39746 |

## Additional Information

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| **Gene ID** | 7852 |
| **Other Names** | FB22; HM89; LAP3; LCR1; NPYR; WHIM; CD184; LESTR; NPY3R; NPYRL; HSY3RR; NPYY3R; D2S201E; CXCR4 |
| **Target/Specificity** | The chemokine receptor CXCR4 is a widely expressed G protein-coupled receptor required for development, hematopoiesis, organogenesis, and vascularization. In disease, CXCR4 has been implicated in WHIM syndrome, HIV, and cancers. Regulation of CXCR4 function occurs through phosphorylation at multiple sites in the C-terminal region. These sites have been shown to be phosphorylated after CXCL12 stimulation, and involve several kinases, such as PKC and GRK kinases. After CXCL12 stimulation of HEK293 cells, Ser-324 and Ser-325 become phosphorylated by PKC and GRK6, while Ser-330 and Ser-339 are phosphorylated by only GRK6. In human astroglia cells, Ser-324 and Ser-325 are rapidly phosphorylated in endogenous CXCR4, while Ser-330 was phosphorylated with slower kinetics. In addition, arrestin binding to CXCR4 is driven by this phosphorylation of far C-terminal residues. Thus, site-specific phosphorylation of CXCR4 may be regulated by multiple kinases lead to complex regulation of CXCR4 signaling. |
| **Dilution** | WB~~1:1000 IHC~~1:100~500 ICC~~N/A |
| **Format** | Antigen Affinity Purified |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | Anti-CXCR4 (Ser-324/Ser-325), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |
| **Shipping** | Blue Ice |

## Background

The chemokine receptor CXCR4 is a widely expressed G protein-coupled receptor required for development, hematopoiesis, organogenesis, and vascularization. In disease, CXCR4 has been implicated in WHIM

syndrome, HIV, and cancers. Regulation of CXCR4 function occurs through phosphorylation at multiple sites in the C-terminal region. These sites have been shown to be phosphorylated after CXCL12 stimulation, and involve several kinases, such as PKC and GRK kinases. After CXCL12 stimulation of HEK293 cells, Ser-324 and Ser-325 become phosphorylated by PKC and GRK6, while Ser-330 and Ser-339 are phosphorylated by only GRK6. In human astroglia cells, Ser-324 and Ser-325 are rapidly phosphorylated in endogenous CXCR4, while Ser-330 was phosphorylated with slower kinetics. In addition, arrestin binding to CXCR4 is driven by this phosphorylation of far C-terminal residues. Thus, site-specific phosphorylation of CXCR4 may be regulated by multiple kinases lead to complex regulation of CXCR4 signaling.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.