

## CD167

Purified Mouse Monoclonal Antibody Catalog # AO2709a

## Specification

# **CD167 - Product Information**

Application WB, IHC, ICC, E **Primary Accession** Q08345 Reactivity Human Host Mouse Clonality **Monoclonal** Mouse IgG2b Isotype Calculated MW 101kDa KDa Immunogen Purified recombinant fragment of human CD167 (AA: extra 21-176) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

## **CD167 - Additional Information**

Gene ID 780

Other Names DDR1;CAK; DDR; NEP; HGK2; PTK3; RTK6; TRKE; EDDR1; MCK10; NTRK4; PTK3A

Dilution WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000

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** CD167 is for research use only and not for use in diagnostic or therapeutic procedures.

# **CD167 - Protein Information**

Name DDR1

Synonyms CAK, EDDR1, NEP, NTRK4, PTK3A, RTK6, TRK

Function

Tyrosine kinase that functions as a cell surface receptor for fibrillar collagen and regulates cell



attachment to the extracellular matrix, remodeling of the extracellular matrix, cell migration, differentiation, survival and cell proliferation. Collagen binding triggers a signaling pathway that involves SRC and leads to the activation of MAP kinases. Regulates remodeling of the extracellular matrix by up-regulation of the matrix metalloproteinases MMP2, MMP7 and MMP9, and thereby facilitates cell migration and wound healing. Required for normal blastocyst implantation during pregnancy, for normal mammary gland differentiation and normal lactation. Required for normal ear morphology and normal hearing (By similarity). Promotes smooth muscle cell migration, and thereby contributes to arterial wound healing. Also plays a role in tumor cell invasion. Phosphorylates PTPN11.

#### **Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Secreted.

#### **Tissue Location**

Detected in T-47D, MDA-MB-175 and HBL-100 breast carcinoma cells, A-431 epidermoid carcinoma cells, SW48 and SNU-C2B colon carcinoma cells and Hs 294T melanoma cells (at protein level) Expressed at low levels in most adult tissues and is highest in the brain, lung, placenta and kidney. Lower levels of expression are detected in melanocytes, heart, liver, skeletal muscle and pancreas Abundant in breast carcinoma cell lines. In the colonic mucosa, expressed in epithelia but not in the connective tissue of the lamina propria. In the thyroid gland, expressed in the epithelium of the thyroid follicles. In pancreas, expressed in the islets of Langerhans cells, but not in the surrounding epithelial cells of the exocrine pancreas. In kidney, expressed in the epithelia of the distal tubules Not expressed in connective tissue, endothelial cells, adipose tissue, muscle cells or cells of hematopoietic origin

## CD167 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD167 - Images



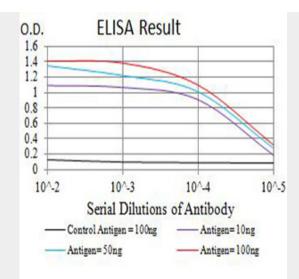


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

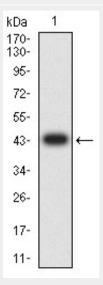


Figure 2:Western blot analysis using CD167 mAb against human CD167 (AA: extra 21-176) recombinant protein. (Expected MW is 43.5 kDa)

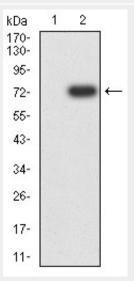




Figure 3:Western blot analysis using CD167 mAb against HEK293 (1) and CD167 (AA: extra 21-176)-hlgGFc transfected HEK293 (2) cell lysate.

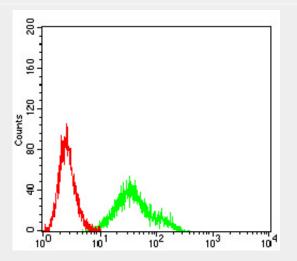


Figure 4:Flow cytometric analysis of Ramos cells using CD167 mouse mAb (green) and negative control (red).

## CD167 - References

1.Am J Physiol Cell Physiol. 2015 May 1;308(9):C685-96.2.Med Oncol. 2013;30(3):626.