

# CD166 Monoclonal Antibody

Catalog No :	YM0106
Reactivity :	Human
Applications :	IHC;IF;ELISA
Target :	CD166
Fields :	>>Cell adhesion molecules
Gene Name :	ALCAM
Protein Name :	CD166 antigen
Human Gene Id :	214
Human Swiss Prot	Q13740
No : Mouse Swiss Prot	Q61490
No : Immunogen :	Purified recombinant fragment of CD166 (aa405-524) expressed in E. Coli.
Specificity :	CD166 Monoclonal Antibody detects endogenous levels of CD166 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	IHC 1:200 - 1:1000. ELISA: 1:10000 IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Cell Pathway :	Cell adhesion molecules (CAMs);
P References :	1. Prostate. 2003 Jan 1;54(1):34-43.



2.1	Clin	Endocrinol	Metab	2003	Jul 88	7	3437-43
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- 3. J Cell Sci. 2004 Jun 1;117(Pt 13):2841-52.
- 4. Med Sci Monit. 2006 Aug;12(8):BR263-73.

**Background :** This gene encodes activated leukocyte cell adhesion molecule (ALCAM), also known as CD166 (cluster of differentiation 166), which is a member of a subfamily of immunoglobulin receptors with five immunoglobulin-like domains (VVC2C2C2) in the extracellular domain. This protein binds to T-cell differentiation antigene CD6, and is implicated in the processes of cell adhesion and migration. Multiple alternatively spliced transcript variants encoding different isoforms have been found. [provided by RefSeq, Aug 2011],

#### **Function:**

domain:The CD6 binding site is located in the N-terminal Ig-like domain.,function:Cell adhesion molecule that binds to CD6. Involved in neurite extension by neurons via heterophilic and homophilic interactions. May play a role in the binding of T- and B-cells to activated leukocytes, as well as in interactions between cells of the nervous system.,similarity:Contains 2 Ig-like V-type (immunoglobulin-like) domains.,similarity:Contains 3 Ig-like C2-type (immunoglobulin-like) domains.,tissue specificity:Spleen, placenta, liver, and weakly in liver. Expressed by activated T-cells, B-cells, monocytes and thymic epithelial cells. Expressed by neurons in the brain. Restricted expression in tumor cell lines. Preferentially expressed in highly metastasizing melanoma cell lines.,

#### Subcellular Location :

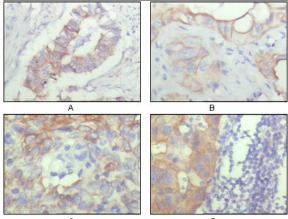
Cell membrane ; Single-pass type I membrane protein . Cell projection, axon . Cell projection, dendrite . Detected at the immunological synapse, i.e, at the contact zone between antigen-presenting dendritic cells and T-cells (PubMed:15294938, PubMed:16352806). Colocalizes with CD6 and the TCR/CD3 complex at the immunological synapse (PubMed:15294938). .; [Isoform 3]: Secreted .

### **Expression**:

Detected on hematopoietic stem cells derived from umbilical cord blood (PubMed:24740813). Detected on lymph vessel endothelial cells, skin and tonsil (PubMed:23169771). Detected on peripheral blood monocytes (PubMed:15048703). Detected on monocyte-derived dendritic cells (at protein level) (PubMed:16352806). Detected at low levels in spleen, placenta, liver (PubMed:9502422). Expressed by activated T-cells, B-cells, monocytes and thymic epithelial cells (PubMed:7760007). Isoform 1 and isoform 3 are detected in vein and artery endothelial cells, astrocytes, keratinocytes and artery smooth muscle cells (PubMed:15496415). Expressed by neurons in the brain. Restricted expression in tumor cell lines. Detected in highly metastasizing melanoma cell lines (PubMed:9502422).

## **Products Images**





Immunohistochemistry analysis of paraffin-embedded human ovary carcinoma (A), kidney carcinoma (B), lung carcinoma (C) and breast carcinoma (D), showing cytoplasmic and membrane localization with DAB staining using CD166 Monoclonal Antibody.

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