

## Product datasheet for **AM08137BT-N**

### CD146 (MCAM) Mouse Monoclonal Antibody [Clone ID: c264]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	c264
Applications:	FC
Recommended Dilution:	<b>Flow Cytometry:</b> < / = 1 µg/10e6 cells. (Ref.1)
Reactivity:	Chicken
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Pooled Ed15 and Ed16 thymocytes from H.B15, H.B19 and H.B21 chicken embryos.
Specificity:	This antibody recognizes Chicken MCAM, Mr 98 kDa (protein core ~84 kDa).
Formulation:	PBS containing 0.09% Sodium Azide as preservative. Label: Biotin State: Liquid purified Ig fraction.
Concentration:	lot specific
Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	melanoma cell adhesion molecule
Database Link:	<a href="#">P43121</a>



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**Background:**

CD146 belongs to the immunoglobulin supergene family with five immunoglobulin like domains (V-V-C2-C2-C2), a transmembrane region and a 63 residue cytoplasmic tail. The protein is a membrane glycoprotein that functions as a Ca<sup>2+</sup> independent cell adhesion molecule involved in heterophilic cell to cell interactions. CD146 has a molecular size of 130 kDa in its reduced form (118 kDa unreduced), and N linked glycosylation accounts for fifty percent of the apparent molecular weight. In some cells the molecule carries a sulfate 3 glucuronyl moiety.

Expression of the molecule was shown in a relatively limited spectrum of normal human tissues (endothelium, smooth muscle, and subpopulations of activated T cells) and malignant neoplasm (melanoma and breast carcinoma). The lineage specific expression pattern of CD146 can be useful in the differential diagnosis of certain lesions including melanomas and various types of gestational trophoblastic lesions. CD146 expression can promote tumor progression in human melanoma, through enhanced interaction between melanoma cells and endothelial cells. However, in breast carcinoma, CD146 may act as a tumor suppressor. Overexpression of CD146 in breast carcinoma cells results in a more cohesive cell growth and in the formation of smaller tumors in nude mice. During implantation and placentation, CD146 is expressed by the intermediate trophoblast in the placental site and binds to its putative receptor in uterine smooth muscle cells thus limiting trophoblastic invasion in the myometrium. Monoclonal antibody specific for CD146 is an important tool for the identification and isolation of cells expressing CD146.

**Synonyms:**

MCAM, MUC18, CD146