

Product datasheet for **AM08062BT-N**

CD45 / LCA (CD45.1 alloantigen) Mouse Monoclonal Antibody [Clone ID: A20]

Product data:

Product Type:	Primary Antibodies
Clone Name:	A20
Applications:	FC, IF
Recommended Dilution:	Flow Cytometry: < / = 1 µg/10e6 cells. (Ref.3,4) Fluorescence Microscopy. (Ref.3,4)
Reactivity:	Mouse
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	The monoclonal antibody A20 recognizes all mouse leukocytes expressing the CD45.1 allotype.
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:	protein tyrosine phosphatase, receptor type, C
Database Link:	<u>Entrez Gene 19264 Mouse</u> <u>P06800</u>



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Background:

The CD45 antigen is an essential regulator of leukocyte activation and development, and is now known to be a protein tyrosine phosphatase, e.g. CD45 is able to dephosphorylate the Src family of protein kinases. (Ref.1,2)

This activity is now known to be required for signal transduction induced by T and B cell antigen receptor engagement, cytokine signaling and Fc receptor stimulation. (Ref.1,2) The functional state of CD45 also has a pronounced effect on lymphocyte development. CD45 exists in multiple forms, such as the restricted variants (CD45R; see companion products AM08044, AM08045, AM08046) and as allelic forms CD45.1/Ly-5.1 and CD45.2/Ly-5.2. The former arises as a result of alternative splicing of different exons. The specificity of antibodies to CD45.1 and CD45.2 has been exploited in studies where resolution of donor and recipient cells is essential, such as in gene therapy or bone marrow transplantation. (Ref.3,4)

The monoclonal antibody A20 is used as Marker for origin of donor and host cells. (Ref.3,4)

Synonyms:

PTPRC, Leukocyte common antigen, L-CA, T200