
Product Data Sheet

Alexa Fluor® 488 anti-human CD54

Catalog # / Size:	2365645 / 25 tests 2365650 / 100 tests	□ Human peripheral blood lymphocytes stained with human CD3 Brilliant Violet 421™ and CD54 (clone HA58) Alexa Fluor™ 488 (left) or mouse IgG1, κ Alexa Fluor® 488 isotype control (right).
Clone:	HA58	
Isotype:	Mouse IgG1, κ	
Immunogen:	Colonic cancer BM314 cells	
Reactivity:	Human	
Preparation:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.	
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)	
Workshop Number:	HCDM listed	
Concentration:	Lot-specific	

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

Application Notes: Clone HA58 recognizes an epitope located in the extracellular D1 domain of CD54.³

Application References:

1. Tsujisaki M, *et al.* 1991. *Clin. Exp. Immunol.* 85:3.
2. Kanwar JR, *et al.* 2003. *Cancer Gene Ther.* 10:468.
3. Kohka H, *et al.* 1998. *J. Leukoc. Biol.* 64:519.

Description: CD54 is a 85-110 kD type I transmembrane protein also known as ICAM-1. It is expressed on activated endothelial cells, high endothelial venules, T and B cells, monocytes/macrophages, granulocytes, and dendritic cells. The expression of ICAM-1 can be released from the cell surface. CD54 plays a role in cellular adhesion and is involved in inflammation and leukocyte extravasation. CD54 has also been shown to be the major cellular receptor for rhinovirus. ICAM-1 binds to CD11a/CD18 (LFA-1), CD11b/CD18 (Mac-1), CD11c/CD18 (p150, 95) as well as hyaluronan and fibrinogen.

Antigen References:

1. Voraberger G, *et al.* 1991. *J. Immunol.* 147:2777.
2. Staunton DE, *et al.* 1988. *Cell* 52:925.
3. Greve JM, *et al.* 1989. *Cell* 56:839.