BioLegend
The path to legendary discovery™

Product Data Sheet

Purified anti-human CD167a (DDR1)

Catalog # / Size: 334001 / 25 µg
334002 / 100 µg

Clone: 51D6

Isotype: Mouse IgG3, κ

Immunogen: NIH-3T3 cells transfected with human DDR1 (CD167a)

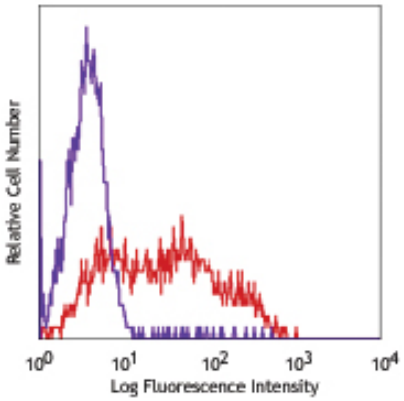
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C.



Human DDR1 transfected cells stained with purified 51D6, followed by anti-mouse IgM PE

Applications:

Applications: FC - *Quality tested*
IP - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported (for the relevant formats) applications include:immunoprecipitation.

Application References:
1. Matsuyama W, *et al.* 2005 *J. Immunol.* 174:6490.
2. Vogel W, *et al.* 2002. *Haematologica* 88:126.

Description: The 51D6 monclonal antibody recognizes human CD167a also known as discoidin domain receptor, DDR1, neuroepithelial tyrosine kinase, epithelial-specific receptor kinase, tyrosine kinase receptor E (trkE), cell adhesion kinase (CAK), PTK3, and RTK6. CD167a is a membrane type II receptor kinase, containing a factor VIII-like domain. Three isoforms of CD167a have been reported. Predicted molecular weights are: isoform 1, approximately 101.5 kD, isoform 2, approximately 101 kD, and isoform 3 approximately 97 kD. CD167a is expressed on epithelial cells, keratinocytes, leukocytes, monocytes and has been reported to be overexpressed in some breast carcinomas. CD167a expression can be upregulated by p53. CD167a has been reported to interact with a variety of proteins including collagen type II alpha 1, collagen type III alpha 1, collagen type V alpha 2, collagen type XI alpha 1, phospholipase gamma 1, SHC, and the lipid-anchored docking protein FRS2. CD167a can be phosphorylated on Y513. Animal studies suggest that CD167a is involved in arterial wound healing. The 51D6 antibody has been shown to be useful for flow cytometric detection of human CD167a as well as immunoprecipitation.

Antigen References:
1. DiMarco E, *et al.* 1993. *J. Biol. Chem.* 268:24290.
2. Hou G, *et al.* 2001. *J. Clin. Invest.* 107:727.
3. Johnson JD, *et al.* 1993. *Proc. Natl. Acad. Sci. USA* 90:5677.
4. Sakuma S, *et al.* 1996. *FEBS Lett.* 398:165.

Related Products:

Product	Clone	Application
APC Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Purified Mouse IgG3, κ Isotype Ctrl	MG3-35	FC, ICC, ICFC, IF, IHC, IP, WB

BioLegend Inc., 9727 Pacific Heights Blvd, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587