

## Technical Data Sheet

## Purified Mouse Anti-Human CD104

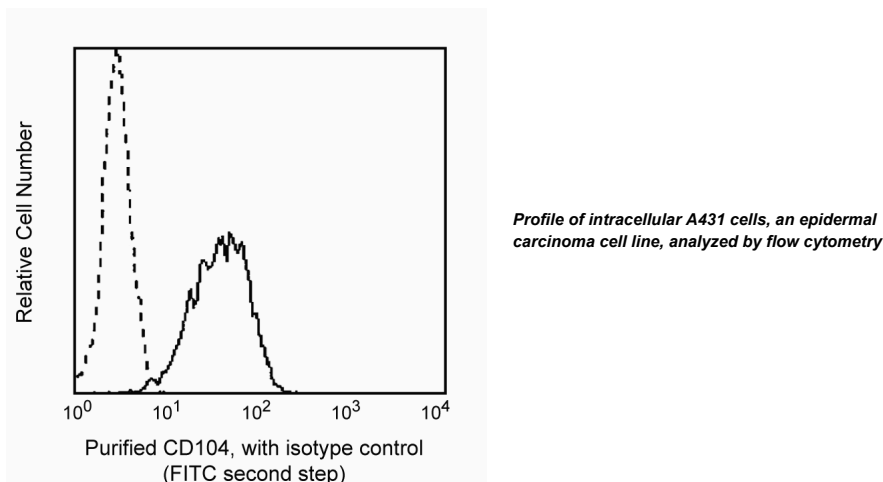
## Product Information

<b>Material Number:</b>	555722
<b>Alternate Name:</b>	Integrin $\beta 4$ chain
<b>Size:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	450-11A
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Reactivity:</b>	QC Testing: Human
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

Reacts with CD104, integrin  $\beta 4$  chain, a 205 kDa transmembrane glycoprotein, associated with CD49f (integrin  $\alpha 6$  chain) to form the  $\alpha 6/\beta 4$  (CD49f/CD104) complex. CD104 is expressed on epithelial cells, Schwann cells, and some tumor cells. The CD49f/CD104 complex is located in the hemidesmosomes of the epidermis, suggesting its role in epidermal cell-basement membrane adhesion. The clone 450-11A recognizes the cytoplasmic domain of human CD104.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at 4° C.

## Application Notes

## Application

Intracellular staining (flow cytometry)	Routinely Tested
Fluorescence microscopy	Reported
Immunoprecipitation	Reported
Western blot	Reported

## Recommended Assay Procedure:

This reagent is effective for indirect immunofluorescence staining of human tissue for flow cytometric analysis and fluorescence microscopy. The antibody is also useful for immunoprecipitation and western blot.

## BD Biosciences

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## Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmlingen/protocols](http://www.bdbiosciences.com/pharmlingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References

Schlossman SF, Boumsell L, Gilks W, et al, ed. *Leukocyte Typing V: White Cell Differentiation Antigens*. New York: Oxford University Press; 1995.(Clone-specific)  
Hemler ME, Crouse C, Sonnenberg A. Association of the VLA alpha 6 subunit with a novel protein. A possible alternative to the common VLA beta 1 subunit on certain cell lines. *J Biol Chem*. 1989; 264(11):6529-6535.(Biology)  
Jones JC, Kurpakus MA, Cooper HM, Quaranta V. A function for the integrin alpha 6 beta 4 in the hemidesmosome. *Cell Regul*. 1991; 2(6):427-438.(Biology)  
Kennel SJ, Epler RG, Lankford TK, et al. Second generation monoclonal antibodies to the human integrin alpha 6 beta 4. *Hybridoma*. 1990; 9(3):243-255.(Biology)  
Sonnenberg A, Calafat J, Janssen H, et al. Integrin alpha 6/beta 4 complex is located in hemidesmosomes, suggesting a major role in epidermal cell-basement membrane adhesion. *J Cell Biol*. 1991; 113(4):907-917.(Biology)  
Tamura RN, Rozzo C, Starr L, et al. Epithelial integrin alpha 6 beta 4: complete primary structure of alpha 6 and variant forms of beta 4. *J Cell Biol*. 1990; 111(4):1593-1604.(Biology)