

---

**anti-Desmoglein-1**

Cat #: HM1110  
Mouse monoclonal IgG  
0.2 µg/µl, store at 4 °C

For research use only

**BACKGROUND**

The desmosome is subdivided into two regions. The plaque region lies adjacent to the plasma, and is believed to contain molecules that attach the intermediate filament cytoskeleton to the desmosome. The core region is composed of transmembrane glycoproteins that are thought to mediate cell-cell adhesion. Desmogleins and desmocollins are the main desmosomal transmembrane proteins. These glycoproteins belong to the members of the cadherin family of adhesion molecules. Three different isoforms of both desmogleins and desmocollins have been identified, named as desmoglein1-3 and desmocollin1-3. Desmosomal cadherins showed differentiation-specific expression in the human epidermis, although the functional significance of this differential expression is not fully understood. Desmoglein-1 has been identified as the autoantigen of the autoimmune skin blistering disease pemphigus foliaceus.

**SPECIFICITY**

This antibody specifically reacts with human desmoglein-1; not cross react with desmoglein-2 or desmoglein-3 protein.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

Molecular Weight desmoglein-1: 165 kDa

**IMMUNOGEN**

A recombinant protein corresponding to the intracellular domain or human desmoglein-1.

**STORAGE**

This antibody is stable for 12 months when stored at 2-8° C.

**REFERENCES**

1. Nilles,L.A., Parry,D.A., Powers,E.E., Angst,B.D., Wagner,R.M. and Green,K.J. (1991) Structural analysis and expression of human desmoglein: a cadherin-like component of the desmosome. J. Cell. Sci. 99, 809-821.
2. Hakuno, M., et. al. Dissociation of intra- and extracellular domains of desmosomal cadherins and E-cadherin in Hailey-Hailey disease and Darier's disease. British Journal of Dermatology 142:702-711 (2000).
3. Wahl, J.K. III, et. al. The amino- and carboxyl-terminal tails of (beta)-catenin reduce its affinity for desmoglein 2. J Cell Sci. 113 :1737- 1745 (2000).
4. Hanakawa,Y., Amagai,M., Shirakata,Y., Yahata,Y., Tokumaru,S., Yamasaki,K., Tohyama,M., Sayama,K. and

Hashimoto,K. (2002) Differential effects of desmoglein 1 and desmoglein 3 on desmosome formation. J. Invest. Dermatol. 119, 1231-1236.

5. Amagai,M. (2003) Desmoglein as a target in autoimmunity and infection. J. Am. Acad. Dermatol. 48, 244-252.
6. Getsios,S., Amargo,E.V., Dusek,R.L., Ishii,K., Sheu,L., Godsel,L.M. and Green,K.J. (2004) Coordinated expression of desmoglein 1 and desmocollin 1 regulates intercellular adhesion Differentiation 72, 419-433.

**PRODUCTS FROM HYPROMATRIX, INC.****A. AntibodyArray™s:**

1. Signal Transduction AntibodyArray™  
Catalog Number HM3000
2. Apoptosis AntibodyArray™  
Catalog Number HM4000
3. Cell Cycle AntibodyArray™  
Catalog Number HM5000

**B. Staining AntibodyArray™s**

1. Staining AntibodyArray™ I  
Catalog Number HM8100
2. AntibodyArray Staining Apparatus  
Catalog Number HM8000

**C. Antibodies****1. HRP-conjugated antibodies**

- anti-phosphotyrosine  
Catalog Number HM2040
- anti-phosphoserine  
Catalog Number HM2070
- anti-phosphothreonine  
Catalog Number HM2090

and more...

**2. Primary antibodies**

Hypromatrix offers a variety of high quality antibodies. For a complete list of antibodies and their specificities, please visit our web site at [www.hypromatrix.com](http://www.hypromatrix.com).

**CONTACT**

**Hypromatrix, Inc.**  
100 Barber Avenue  
Worcester, MA 01606  
USA

Tel: 508-856-7900  
Fax: 508-302-0748  
Email: [contact@hypromatrix.com](mailto:contact@hypromatrix.com)  
Web: [www.hypromatrix.com](http://www.hypromatrix.com)