

## Anti-desmosome/hemidesmosome [F12] Standard Size Ab00797-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

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**Isotype and Format:** Human IgM, Kappa

**Clone Number:** F12

**Alternative Name(s) of Target:**

**UniProt Accession Number of Target Protein:**

**Published Application(s):** IEM, IF

**Published Species Reactivity:** Human

**Immunogen:** F12 was established by fusing peripheral blood lymphocytes derived from a human vulgaris patient with a hetermyeloma cell line.

**Specificity:** F12 recognizes an unknown polypeptide of desmosomal and hemidesmosomal plaques with a MW of 185 kDa (determined from immunoblotting using bovine tongue epithelium extract as the substrate), and by IEM (immunoelectron microscopy) it was determined that it is the intracellular part of the desmosome that is bound (Gilbert, 1997). F12 shares some immunochemical properties with autoantibodies present in paraneoplastic pemphigus sera. Pemphigus diseases are those resulting in blistering of the skin due to the production of autoantibodies against keratinocyte surface proteins - autoantibodies of patients with pemphigus vulgaris recognize desmoglein 1 (Dsg1), a major glycoprotein of the desmosome complex.

**Application Notes:** F12 labels the keratinocyte membrane and the basement membrane zone of rat tongue sections by indirect immunofluorescence (IIF). The antibody also stains both the cell membrane and the basement membrane zone of stratified squamous epithelia, and other epithelial tissues such as urinary bladder, small bowel, thymus, and liver. Non-epithelial tissues, such as myocardium are additionally stained. Sera from patients with pemphigus vulgaris can be incubated with human skin sections to determine their capacity to block the binding of F12 in an IIF blocking assay. IEM (immunoelectron microscopy) can be used to determine the ultralocalization of the antibody.

**Antibody First Published in:** Gilbert et al. Production of a Human Monoclonal Anti-epithelial Cell Surface Antibody Derived from a Patient with Pemphigus Vulgaris Journal of Autoimmunity (1992) 5,173-182

[PMID:1627232](#)

**Note on publication:** Describes the generation of an anti-desmosome IgM antibody which recognises a 185 kDa protein which was also recognized by the sera of two patients with pemphigus vulgaris. Its binding properties were studied.

## Product Form

**Size:** 50 µg Purified antibody.

**Purification:** Affinity Purified using a recombinant lectin column

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.