

SLPI Antibody

SLPI: Secretory leukocyte protease inhibitor, HUS1

CATALOG No.:4249

BACKGROUND:

Secretory leukocyte protease inhibitor (SLPI) is produced at mucosal surfaces, primarily the upper respiratory tract and is thought to play an important role in the antiprotease defense mechanism of the lung (1). SLPI forms inhibitory complexes with numerous proteolytic enzymes such as neutrophil elastase, and has been shown to possess anti-inflammatory, anti-viral, and antibacterial activities (2). Its expression in oral epithelial cells is stimulated by HIV-1 gp120, suggesting that SLPI is a component of the oral mucosal response to HIV-1 (3). In peripheral blood monocytes, SLPI can inhibit NF- κ B activation by inhibiting I κ B degradation in the cytoplasm and competing for NF- κ B binding sites in the nucleus (4). This attenuation of the inflammatory response may also act to suppress liver metastases and other cancer cell invasions, but promote blood-borne metastasis via an invasion-independent pathway (5,6).

SOURCE:

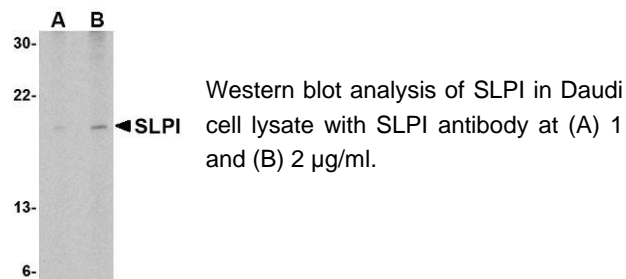
Rabbit polyclonal SLPI antibody was raised against a 17 amino acid peptide from near the center of human SLPI (GenBank accession no. CAA28187).

APPLICATION:

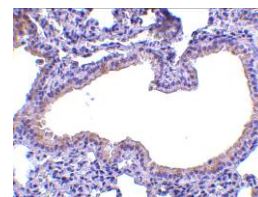
SLPI antibody can be used for detection of SLPI by Western blot at 1 – 2 μ g/ml. (Optimal dilution should be determined by user.) Daudi cell lysate can be used as positive control. SLPI antibody is human and mouse reactive. **For research use only.**

STORAGE:

SLPI antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Immunohistochemistry of SLPI in mouse lung tissue with SLPI antibody at 10 μ g/ml.



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4249P**.

Daudi Cell Lysate, Catalog No. **1224**.

SLPI Antibody (IN), Catalog No. **4251**.

REFERENCES:

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3. Jana NK, Gray LR and Shugars DC. Human immunodeficiency virus type 1 stimulates the expression and production of secretory leukocyte protease inhibitor (SPLI) in oral epithelial cells: a role for SLPI in innate mucosal immunity. *J. Virol.* 2005; 79:6432-40.
4. Taggart CC, Cryan S-A, Weldon S, et al. Secretory leucoprotease inhibitor binds to NF- κ B binding sites in monocytes and inhibits p65 binding. *J. Exp. Med.* 2005; 202:1659-68.
5. Wang N, Thuraisingam T, Fallavollita L, et al. The secretory leukocyte protease inhibitor is a type 1 insulin-like growth factor receptor-regulated protein that protects against liver metastasis by attenuating the host proinflammatory response. *Cancer Res.* 2006; 66:3062-70.
6. Sugino T, Yamaguchi T, Ogura G, et al. The secretory leukocyte protease inhibitor (SLPI) suppresses cancer cell invasion but promotes blood-borne metastasis via an invasion-independent pathway. *J. Pathol.* 2007; 212:152-60. (07-01D)