



DB074: Sp17 (C17)

Background:

The highly immunogenic cancer-testis antigen Sp17 was originally thought to be expressed exclusively in the testis with the primary function of binding the extra cellular matrix of the oocyte (1,2). Upon further investigation Sp17 was found to be expressed by tumor cells with multiple myeloma in up to 30% of the cases studied (3,4). Sp17 has three functional domains, N-terminal, central, and C-terminal domains. The N-terminal domain contains an A-kinase anchoring protein binding motif. The central domain is necessary for heparin binding and the C-terminal domain contains a calmodulin-binding domain (1&2).

Origin:

Sp17 (C17) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the carboxy terminal domain of human Sp17.

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG, Sp17 (C17) DB074, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, DB074P, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

Sp17 (C17) is recommended to detect human Sp17 by western blotting. Recommended western blotting starting dilution 1:200.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

1. Wen Y, Richardson RT, Widgren EE, O'Rand MG. 2001. Characterization of Sp17: a ubiquitous three domain protein that binds heparin. *Biochem J.* 357(Pt1):25-31.
2. Frayne J, Hall L. 2002. A re-evaluation of sperm protein 17 (Sp17) indicates a regulatory role in an A-kinase anchoring protein complex, rather than a unique role in sperm pellucida binding. *Reproduction* 124(6):767-774.
3. Chiriva-Internati M, Wang Z, Salati E, Wroblewski D, Lim SH. 2002. Successful generation of sperm protein 17 (Sp17)-specific cytotoxic T lymphocytes from normal donors: implication for tumour-specific adoptive immunotherapy following allogeneic stem cell transplantation for Sp17-positive multiple myeloma. *Scand J Immunology* 56(4):429-433.
4. Chiriva-Internati M, Wang Z, Xue Y, Bumm K, Hahn AB, Lim SH. 2001. Sperm protein (Sp17) in multiple myeloma: opportunity for myeloma-specific donor T cell infusion to enhance graft-versus-myeloma effect without increasing graft-versus-host disease risk. *Eur J Immunology* 31(8):2277-2283.