

## ***Squarix ImmunoSelect<sup>®</sup> Adhesion Slides***

Squarix ImmunoSelect<sup>®</sup> adhesion slides are developed for microscopical use, where precious and only poorly available cellular material should be efficiently immobilized. In contrast to commonly coated slides the ImmunoSelect adhesion slides stop cell loss even at harsh incubation procedures. The ImmunoSelect<sup>®</sup> adhesion surface allows a fast and highly efficient immobilization of the cells and helps to reduce cellular material and reagents. The extremely fast binding of the cellular material to the glass surface saves time consuming centrifugation and drying procedures.

### ***Principle***

The new adhesive coating of the ImmunoSelect<sup>®</sup> adhesion slides with a SquareLinque<sup>®</sup> surface combines different binding principles to natural surface structures of cells and tissues and anchored them securely to the glass surface. Due to this procedure the cells do not loose their antigenicity or ability to function.

### ***Cell-Binding***

For an optimal adhesive immobilization of the cells to the surface of the adhesion slides the cell suspension should be free of culture medium and proteins, because media components could interact with the adhesive coat and reduce cell binding. Cells or tissues should therefore be washed and then dropped onto the slide in an isotonic buffer (e.g. PBS) solution. The immobilization of the cells begins immediately after contact to the glass surface. Drying of the samples is therefore not necessary any more. The cellular material can then be fixated with all common fixatives. For elongated cell-cultivation the buffer can be exchanged against appropriate culture medium after cell adhesion. Recent findings did not show any preferential cell type binding or loss in heterogeneous cellular material.

### ***Cell Amount***

Due to the stable immobilization of the cells to the glass surface, already at intensive washing and denaturation procedures tests can be performed with as few as several hundred cells.

## ***Cell Types***

*All kinds of cells can be tested:*

- All blood cells such as lymphocytes, monocytes, granulocytes, thrombocytes and erythrocytes
- Cells from bone marrow, effusion, liquor, bronchoalveolar lavage and cell suspension of lymph nodes and tumours
- Cell lines
- Artificial tissue
- Tissue sections and preparations

## ***Cultivation of Cells on Adhesion Slides***

For elongated cultivation of living cells the slides can be heat or alcohol sterilized without loss of binding capacity.

Recent tests have shown that the cultivation on adhesion slides is not compatible to all cell types. For actual informations please contact Squarix Biotechnology.

## ***Application of Adhesion Slides***

- Immunofluorescence methods or other comparable methods\*
- Immunoenzymatic tests (Peroxidase, Alkaline Phosphatase)
- Histological staining techniques e.g. Pappenheim
- Intracellular antigen evidencing
- Molecular biological tests, e.g. FISH or the detection of specific DNA modifications.

## ***Compatibility with Staining Techniques***

*The adhesion slides are tested for several fluorescence dyes:*

- Fluorescein derivatives, e.g. FITC
- Rhodamine derivatives, e.g. TRITC, Texas Red
- Cy3 and Cy5
- Phycobilliproteins, e.g. PE
- DAPI
- Hoechst 33358 and 3334

## ***Selected Literature***

Bracker TU, Giebel B, Spanholtz J, Sorg UR, Klein-Hitpass L, Moritz T, Thomale J; Stringent regulation of DNA repair during human hematopoietic differentiation: a gene expression and functional analysis. *Stem Cells* (2006), 24, 722-730

Thomas JP, Lautermann J, Liedert B, Seiler F, Thomale J; High accumulation of platinum-DNA adducts in strial marginal cells of the cochlea is an early event in cisplatin but not carboplatin ototoxicity. *Molecular Pharmacology* (2006), 70, 23-29

Rajedran L, Beckmann J, Magenau A, Boneberg E, Gaus K, Viola A, Giebel B, Illges H; Flotillins are involved in the polarization of primitive and mature hematopoietic cells. *PLoS One* (2009), 4(12), e8290

Dhar S, Lippard SJ; Mitaplatin, a potent fusion of cisplatin and the orphan drug dichloroacetate. *PNAS* (2009), 106(12), 22199 – 22204

Kolishetti N, Dhar S, Valencia PM, Lin LQ, Karnik R, Lippard SJ, Langer J, Farokhzad OC; Engineering of self-assembled nanoparticle platform for precisely controlled combination drug therapy. *PNAS* (2010), 107(10), 17939-17944

## Ordering Information

Catalog no.	Article	Unit	Price*
SQ-IS-10050	ImmunoSelect® Adhesion Slides (50 slides)	50	59.90 €
SQ-IS-10100	ImmunoSelect® Adhesion Slides (100 slides)	100	99.80 €

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\*Price does not include tax and shipping costs. Please inquire.