**Prediction of radio-resistant prostate cancer based on differentially expressed proteins**

Tim Nestler1, Maike Wittersheim2, Stephan Schaefer2, Martin Hellmich3, David Pfister1, Margarete Odenthal2, Melanie von Brandenstein1, Reinhard Buettner2, Axel Heidenreich1

1Department of Urology, University Hospital of Cologne, Cologne, Germany

2Institute of Pathology, University Hospital of Cologne, Cologne, Germany

3Institute of Medical Statistics and Computational Biology, University of Cologne, Cologne, Germany

**Corresponding author:**

Tim Nestler, M.D.

Department of Urology, Uro-Oncology, Robot Assisted and Reconstructive Urologic Surgery University Hospital Cologne

Kerpener Straße 62

50937 Cologne, Germany

Telephone: +49 221 478 82108

Fax: +49 221 478 82372

E-mail: tim.nestler@uk-koeln.de

**Supplementary Table 1:** Primary and secondary antibodies as well as the applied staining conditions used for immunohistochemistry.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Antibody** | **Species** | **Clonality** | **Manufacturer** | **Order number** | **Stainer** | **Pretreatment** | **Dilution** | **Secondary antibody** | **Manufacturer** | **Species** | **Order number** |
| AKR1C3 | rabbit  | polyclonal | Sigma Aldrich | A6229 | Thermo Fisher | EDTA | 1:800 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| ALDOA | rabbit  | monoclonal | Abcam | ab169544 | Thermo Fisher | EDTA | 1:200 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| AR | mouse  | monoclonal | Dako | M3562 | Leica Bond Max | Citrate | 1:400 | Polymer Refine Detection | Bond | mouse, rabbit | DS9800 |
| BCL-2 | mouse  | monoclonal | Dako | - | Leica Bond Max | Citrate | 1:200 | Polymer Refine Detection | Bond | mouse, rabbit | DS9800 |
| BIRC5 | rabbit  | monoclonal | Cell Signaling | 2808 | Thermo Fisher | Citrate | 1:400 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| CAV-1 | rabbit  | polyclonal | Proteintech | 16447-1-AP | Thermo Fisher | EDTA | 1:100 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| CLU | rabbit  | monoclonal | Abcam | ab92548 | Thermo Fisher | EDTA | 1:100 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| CXCR4 | rabbit  | monoclonal | Abcam | ab124824 | Thermo Fisher | EDTA | 1:100 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| Cyclin D1 | rabbit  | monocolonal | Cell Marque | SP4 | Leica Bond Max | EDTA | 1:25 | Polymer Refine Detection | Bond | mouse, rabbit | DS9800 |
| DAB2IP | rabbit  | polyclonal | Abcam | ab87811 | Thermo Fisher | Citrate | 1:100 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| HBP1 | rabbit  | monoclonal | Thermo Fisher | PA5-38577 | Thermo Fisher | EDTA | 1:100 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| HIF-1a | mouse  | monoclonal | Abcam | ab1 | Thermo Fisher | Citrate | 1:50 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |
| LDH Isoenzyme V | rabbit  | polyclonal | Abcam | ab85472 | Leica Bond Max | Citrate | 1:300 | Polymer Refine Detection | Bond | mouse, rabbit | DS9800 |
| PIK3R1 | rabbit  | monoclonal | Thermo Fisher | PA5-38904 | Leica Bond Max | EDTA | 1:50 | Polymer Refine Detection | Bond | mouse, rabbit | DS9800 |
| PTEN | mouse  | monoclonal | Dako | M3627 | Thermo Fisher | Citrate | 1:100 | Bright Vision+ | Medac Diagnostika | mouse, rabbit, rat | DPVB999 HRP |