Fakultät für Medizin

Dokumenttyp: journal article

Autor(en) des Beitrags: Berg, D; Bronger, H; Walch, A; Höfler, H; Becker, KF

Titel des Beitrags: [Analysis of signalling pathways in formalin-fixed breast cancer tissues].

Abstract: AIMS: The aim of our study was to develop and optimize methods for relative and absolute protein quantifications in formalin-fixed and paraffin-embedded (FFPE) tissues with special emphasis on HER mediated pathways in breast cancer. METHODS: Using a recently developed technology for extraction of full-length proteins from FFPE tissues, we evaluated >50 commercial antibodies for specificity using Western blots and protein microarrays. Purified HER receptor proteins were used to determine absolute protein concentrations. RESULTS: We confirmed specificity of 23 commercially available phosphospecific and non-phosphospecific antibodies using Western blots with protein extracts from cell lines and tissue extracts from breast cancer patients. Spiking known amounts of purified HER receptor proteins in HER receptor negative tissue extracts allowed us to precisely measure abundances of HER-receptors. CONCLUSIONS: Our results will provide a basis for the development of diagnostic techniques for the quantitative analysis of deregulated HER receptors and downstream signalling proteins in typical clinical tissues.

Zeitschriftentitel / Abkürzung: Pathologe

Jahr: 2010

Band: 31 Suppl 2