

Cytokeratin 14 (KRT14) (Squamous Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone KRT14/4128]

Catalog No	Format	Size
3861-MSM8-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3861-MSM8-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3861-MSM8-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

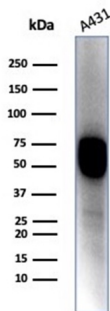
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

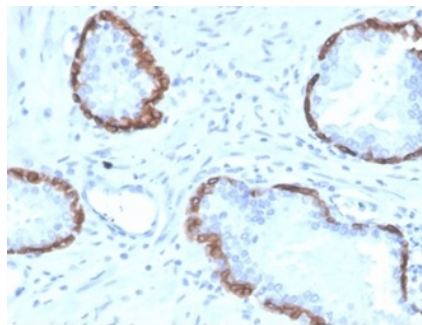
Clone	KRT14/4128
Gene Name	KRT14
Immunogen	Recombinant human KRT14 fragment (around aa350-472) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	~50kDa
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	A431 or HeLa cells. Human prostate, Skin or squamous cell carcinoma.

*Optimal dilution for a specific application should be determined.

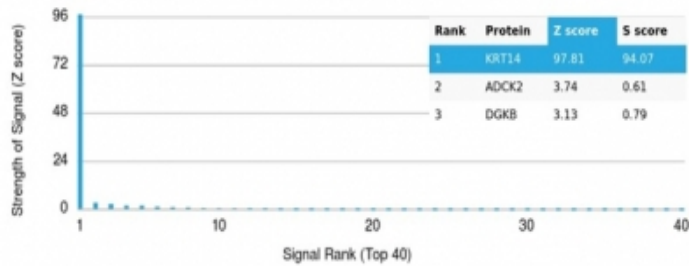
Product Images for Cytokeratin 14 (KRT14) (Squamous Cell Marker) Antibody



Western blot analysis of A431 cell lysate using Cytokeratin 14 Mouse Monoclonal Antibody (KRT14/4128).



Formalin-fixed, paraffin-embedded human prostate stained with Cytokeratin 14 Mouse Monoclonal Antibody (KRT14/4128). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



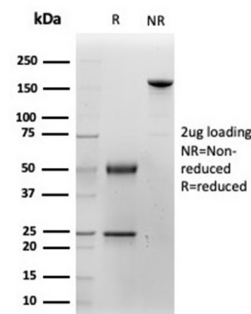
Analysis of Protein Array containing more than 19,000 full-length human proteins using Cytokeratin 14 (KRT14)-Monospecific Mouse Monoclonal Antibody (KRT14/4128). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

Specificity & Comments

Cytokeratin 14 is a member of the type I keratin family of intermediate filament proteins. It always pairs with the type II keratin K5 and form the primary keratin pair of the keratinocytes of stratified squamous epithelia, including the epidermis as well as mucosal non-keratinizing stratified squamous epithelia. Cytokeratin 14 is strongly expressed in the undifferentiated basal cell layer containing the stem cells and are down-regulated in the differentiating suprabasal cell layers. Otherwise, in the widely well stratified follicular outer root sheath, cytokeratin 14 is uniformly expressed throughout all layers. The expression spectrum of cytokeratin 14 in tumors corresponds well to the patterns in normal epithelia. Thus, most squamous cell carcinomas as well as malignant mesotheliomas strongly express this keratin whereas little, focal, or no expression is found in adenocarcinomas. Cytokeratin 14 may be a useful marker in the differential diagnosis of squamous cell carcinoma from other epithelial tumors. Recent studies also indicate that CK14 expression in breast cancer corresponded with poor clinical outcome and that CK14 may have diagnostic value in the sub-classification of NSCLC.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.



SDS-PAGE Analysis of Purified Cytokeratin 14 Mouse Monoclonal Antibody (KRT14/4128). Confirmation of Purity and Integrity of Antibody.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Basal Cell Marker, Developmental Biology