

# Product Datasheet

## Cytokeratin, pan Antibody (AE-1/AE-3) - IHC-Prediluted NBP2-48225

Unit Size: 7 ml

Store at 4C.

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**NBP2-48225**

Cytokeratin, pan Antibody (AE-1/AE-3) - IHC-Prediluted

Product Information	
Unit Size	7 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C.
Clonality	Monoclonal
Clone	AE-1/AE-3
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa/IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Product Description	
Description	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining.
Host	Mouse
Gene ID	3848
Gene Symbol	KRT1
Species	Human, Mouse, Rat, Bovine, Canine, Chicken, Monkey, Rabbit, Reptile, Zebrafish
Reactivity Notes	Reptile reactivity reported in scientific literature (PMID: 11351328). Zebrafish reactivity reported in scientific literature (PMID: 30970016).
Marker	Epithelial Marker
Specificity/Sensitivity	Twenty human keratins are resolved with two-dimensional gel electrophoresis into acidic (pI 6.0) subfamilies. This antibody cocktail recognizes acidic (Type I or LMW) and basic (Type II or HMW) cytokeratins, which 67kDa (CK1); 64kDa (CK3); 59kDa (CK4); 58kDa (CK5); 56kDa (CK6); 52kDa (CK8); 56.5kDa (CK10); 50kDa (CK14); 50kDa (CK15); 48kDa (CK16); 40kDa (CK19). Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis. AE-1/AE-3 is a broad spectrum anti pan-cytokeratin antibody cocktail, which differentiates epithelial tumors from non-epithelial tumors e.g. squamous vs. adenocarcinoma of the lung, liver carcinoma, breast cancer, and esophageal cancer. It has been used to characterize the source of various neoplasms and to study the distribution of cytokeratin containing cells in epithelia during normal development and during the development of epithelial neoplasms. This antibody stains cytokeratins present in normal and abnormal human tissues and has shown high sensitivity in the recognition of epithelial cells and carcinomas.
Immunogen	Human epidermal keratin
Product Application Details	
Applications	Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Immunohistochemistry, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen

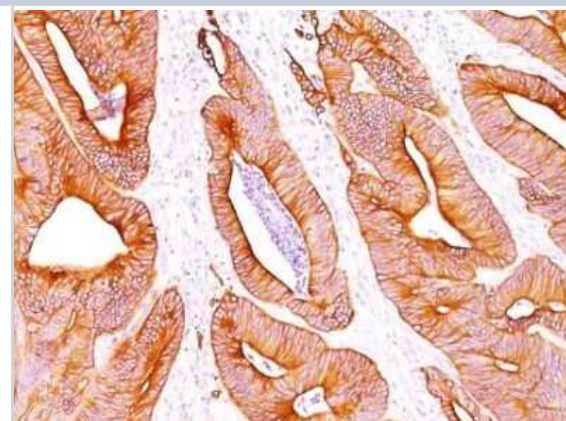


## Application Notes

The staining pattern of the pan cytokeratin antibody cocktail may be different than that of either antibody separately. For example, hepatocellular, adrenal cortical, clear cell renal and chromophobe renal cell carcinomas have been reported to be negative for the pan cytokeratin antibody. In this regard, the pan cytokeratin antibody can be used as part of a screening panel to more extensively define the tumor cell lineages. Immunohistochemistry (Formalin-fixed): 0.25-0.5ug/ml for 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 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. The pan cytokeratin antibody may cross-react with GFAP, leading to aberrant positive staining of glial tumors such as ependymoma, glioblastoma, or schwannoma (Ordonez, 2013). Use in Immunohistochemistry reported in scientific literature (PMID: 29169625). This antibody cocktail recognizes acidic (Type I or LMW) and basic (Type II or HMW) cytokeratins, which 67 kDa (CK1); 64 kDa (CK3); 59 kDa (CK4); 58 kDa (CK5); 56 kDa (CK6); 52 kDa (CK8); 56.5 kDa (CK10); 50k Da (CK14); 50 kDa (CK15); 48 kDa (CK16); 40 kDa (CK19). The pan cytokeratin cocktail does not react with keratin 18, which is also expressed in carcinomas. As such, negative staining with NBP2-29429 in of itself may not be sufficient evidence to rule out the possibility of a carcinoma (Ordonez, 2013).

## Images

Analysis using Azide and BSA Free version of NBP2-48225. Human Colon Carcinoma stained with pan Cytokeratin Monoclonal Antibody cocktail (AE-1/AE3).





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### **Products Related to NBP2-48225**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
DNST0	Endostatin [HRP]
MAB1455	Albumin Antibody (188835) [Unconjugated] - Serum

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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