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Technology Transfer Office

# Natriuretic Peptide Receptor as a Biomarker for Cancer

Researchers at the University of South Florida have discovered biomarker properties of Natriuretic peptide receptor A (NPRA) in cancer detection.

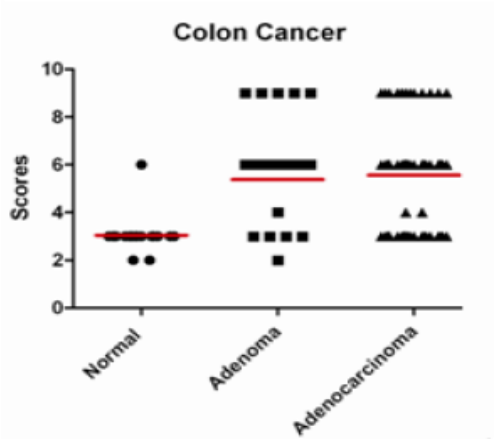
Natriuretic peptide receptor A (NPRA) is expressed on human cancer cell lines; however its expression in human tissues is unknown. To evaluate the role of NPRA in tumor progression, its expression was examined in prostate, breast, colon, pancreas, Merkell cell lymphoma, GIST, ovarian and melanoma tumor tissues. Tissue microarrays were immunostained using an in-house human NPRA antibody in a Ventana Discovery XT automated system and the data statistically analyzed. Results show that NPRA expression is positively associated with breast and prostate tumor progression. Moreover, increased NPRA staining was seen in early lesions of colon and merkell cell lymphoma tumor tissues.

These studies suggest that NPRA can be considered as a progression marker for breast and prostate cancer. Further, NPRA can be used as a early biomarker for colon and merkel cell lymphoma.

## ADVANTAGES:

- **Biomarker for cancer**
- **Early and rapid detection**
- **Detection of various cancers**

*Novel Diagnostic*




*Tissue microarray results for colon cancer*

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