

# How a protein called CTR9 protects us from breast cancer

Researchers studied breast cancer tumors and cells from mice.

Mice with CTR9 that did not work normally had more tumors in their milk ducts and alveoli.

When CTR9 protein is not working...

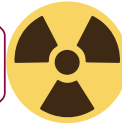
CTR9

mammary luminal cells (stem cells) grow more

When CTR9 protein is working...

CTR9

cells protected from carcinogens



Healthy Alveoli

Healthy Milk Duct

Breast Cancer

more milk duct cells

more alveoli cells

carcinogens can lead to cancer



**Carbone Cancer Center**  
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SCHOOL OF MEDICINE AND PUBLIC HEALTH

Gui Ma, Ang Gao, Mingshan Hu, Ngai Ting Chan, Yidan Wang, Wei Xu. AACR 2025.

