

RING (Really Interesting New Gene) is a domain found in many proteins involved in diverse biological processes, including DNA repair, apoptosis, and signal transduction. The RING domain is a type of zinc finger domain that binds to two zinc ions and coordinates them in a specific orientation to form a unique fold.

Proteins containing RING domains often function as E3 ubiquitin ligases, which facilitate the transfer of ubiquitin from E2 ubiquitin-conjugating enzymes to specific substrates. This ubiquitination process can lead to protein degradation by the proteasome or alter protein activity, localization, or interactions.

The discovery of the RING domain and its role in protein ubiquitination has led to a better understanding of cellular processes and has potential therapeutic implications for diseases such as cancer, where aberrant protein ubiquitination can contribute to tumor development and progression.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=ring>

Last update: **2024/06/07 02:58**

