

## **The Oncogenic Ras Superfamily Knowledgebase**

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The uncontrolled proliferation of normal cells leads to oncogenesis. The RAS genes and proteins have been found to be involved in regulating the expression, growth and survival of cells. Ras (RA<sub>t</sub> Sarcoma) is a major multigene superfamily which is involved in nearly 30% of the known human tumors associated with thyroid, pancreas, lung and colorectal region. The Ras proteins are "low molecular weight" guanine nucleotide binding proteins which play a pivotal role in the control of normal and transformed cell proliferation. The mutations in the Ras genes convert them into active oncogenes. Immense research has been carried out on this superfamily resulting in massive data across various resources. However, no public database was available for the access of information at a common site. We have compiled the data available across various diverse public databases onto a single platform. It contains comprehensive information on both the gene and proteins of this superfamily. External links to other databases are also available. The information on genes encompasses data on their chromosomal positions, orthologies, motifs, structures, pathways and associated diseases. The information on proteins covers the posttranslational modifications, upstream and downstream regulators as well as the pathways wherein these proteins are involved. Tools and search engines for easy retrieval of data have been incorporated. The database is freely accessible online at <http://www.aiims.edu/RAS.html>

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