

*Mutation frequency*

~ 30% of all human cancers

~ 20% of all human cancers

~ 1%

0%

Ras



B-Raf



MEK



ERK

- Pancreas 90% (K-Ras)
- Papillary thyroid 60%
- Colon 35% (K-Ras)
- NSCLC 35% (K-Ras)
- ALL, AML 30% (N-Ras)
- Melanoma 15% (N-Ras)

- Melanoma 44%
- Papillary thyroid 35-70%
- Ovary 30%
- Colon 14%

- Mutations in MEK1 identified in lung carcinoma, colon carcinoma and melanoma

- No mutation found to date