p38 Beta MAPK as a Potential Target for Oral Cancer Therapy

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Oral cancer is a fairly common malignancy that is associated with a high rate of morbidity and mortality. The Limitations of the present therapies might be contributed to the involvement of multiple pathways in the development and survival of cancer. Nevertheless, a hidden critical pathway should not be overlooked. While p38 MAPK is reported to be involved in different cellular activities such as proliferation and differentiation, reports rarely define the roles of the individual members of p38 MAPK family. We used two unique primary cell lines developed by our lab representing chemically induced oral cancer cells (T28) and non-tumor cells (N28) obtained from tissues surrounding the induced cancer as a model to screen out whether p38 MAPK was involved in the malignant transformation processes. Our findings suggest an association between p38β not alpha and the oral cancer development.

Keywords: Oral cancer; MAPK; p38β