

EXPRESSION LEVEL OF TAP73 ISOFORM IN ORAL SQUAMOUS CELL CARCINOMAS CELL LINES

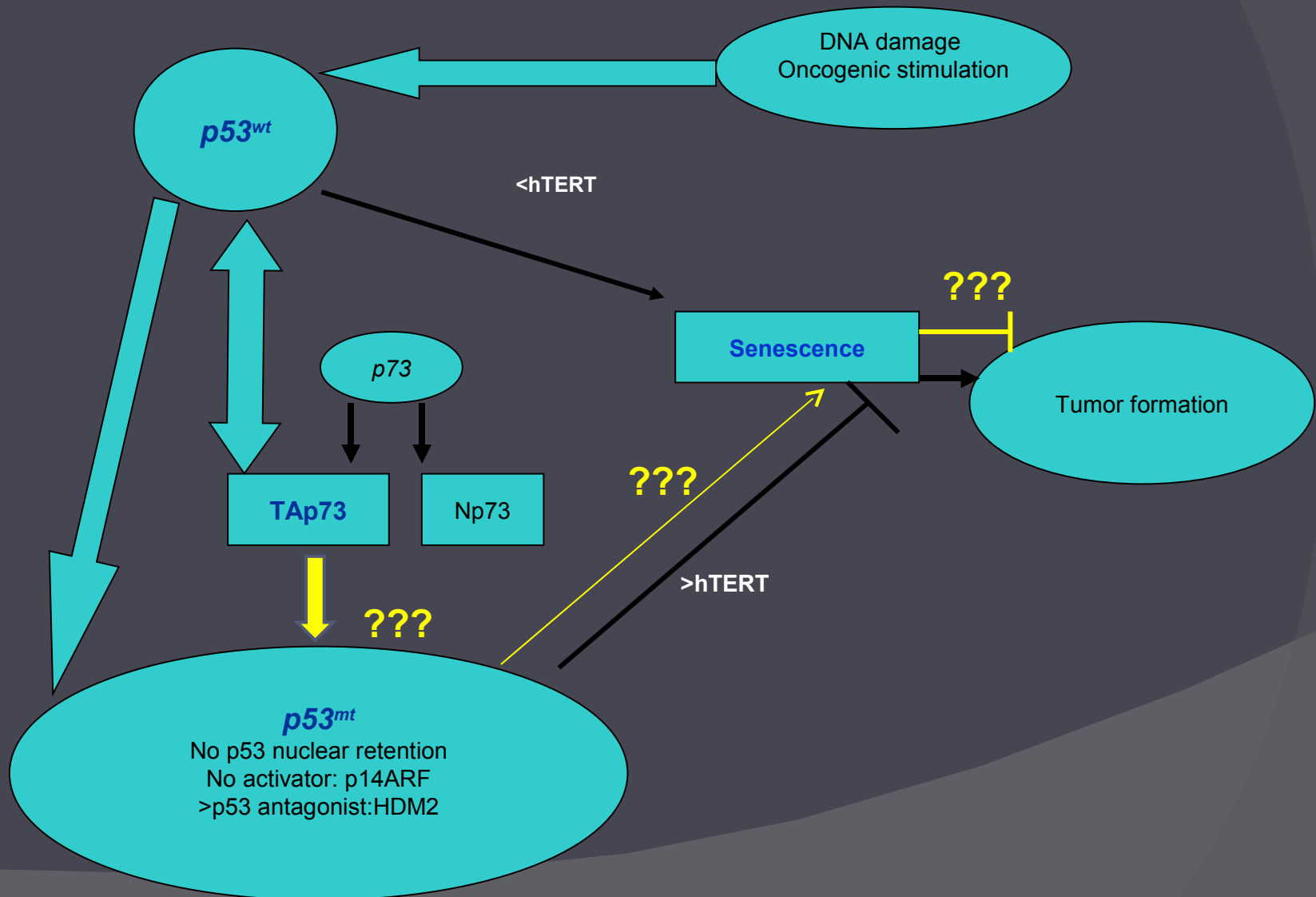


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BACKGROUND

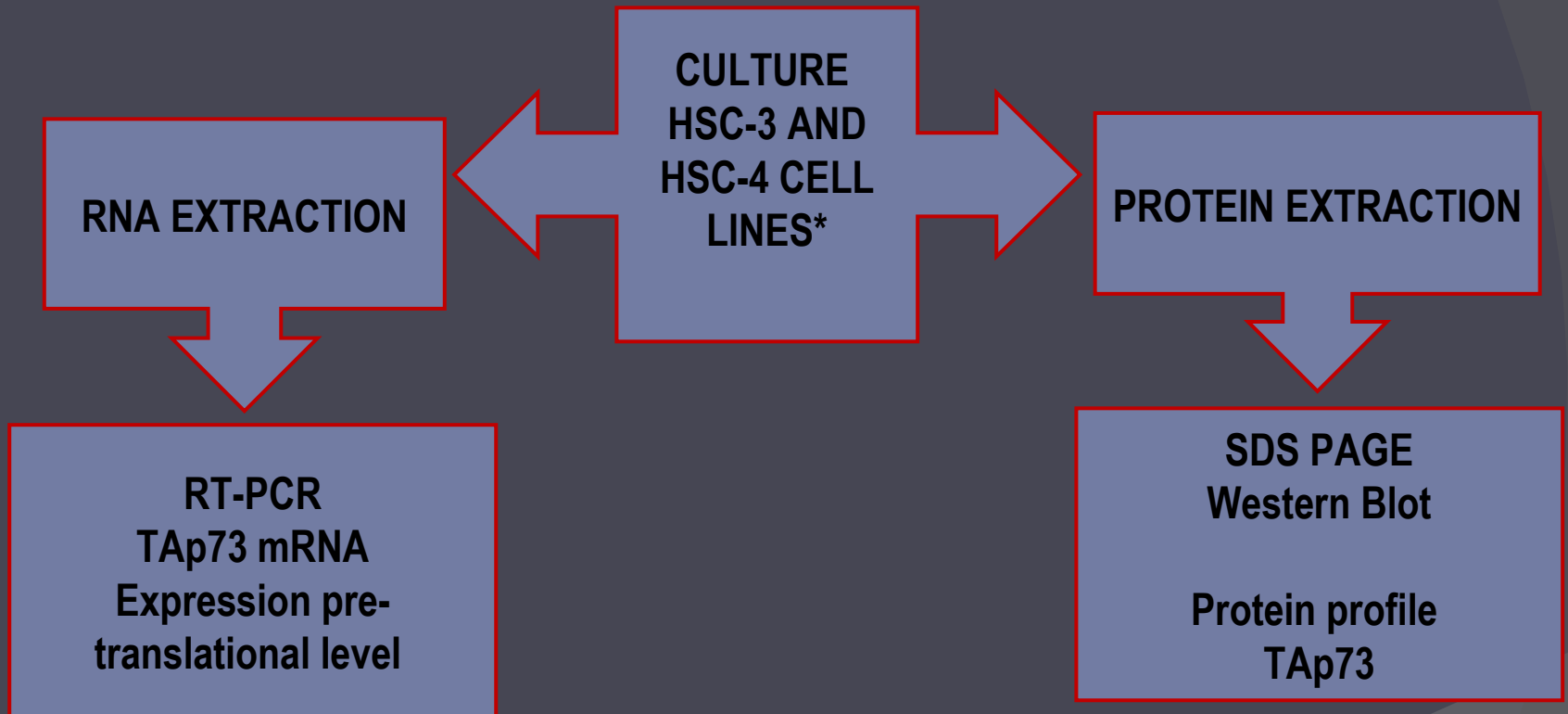


OBJECTIVES

- ◎ To analyze the role of isoform TAp73 on telomerase activity in two oral squamous cell carcinoma in relation to their status of p53 mutation
- ◎ To see the chance of TAp73 isoform as anti-proliferation gene therapy.

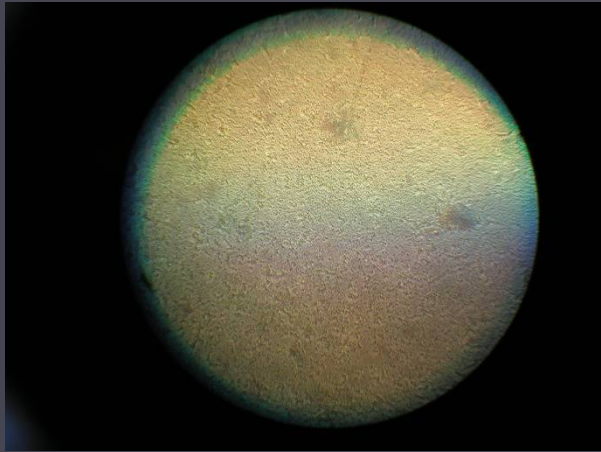
*This study has been approved by Ethics Committee of Faculty of Dentistry.

METHODS

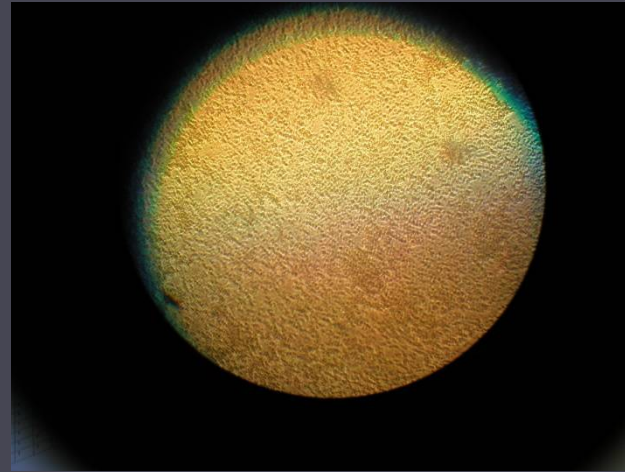


***HSC-3: cell with p53^{mt} and do not produce P53 protein.
HSC-4: cell with p53^{mt} and produce mutant P53R248Q protein.**

METHODS



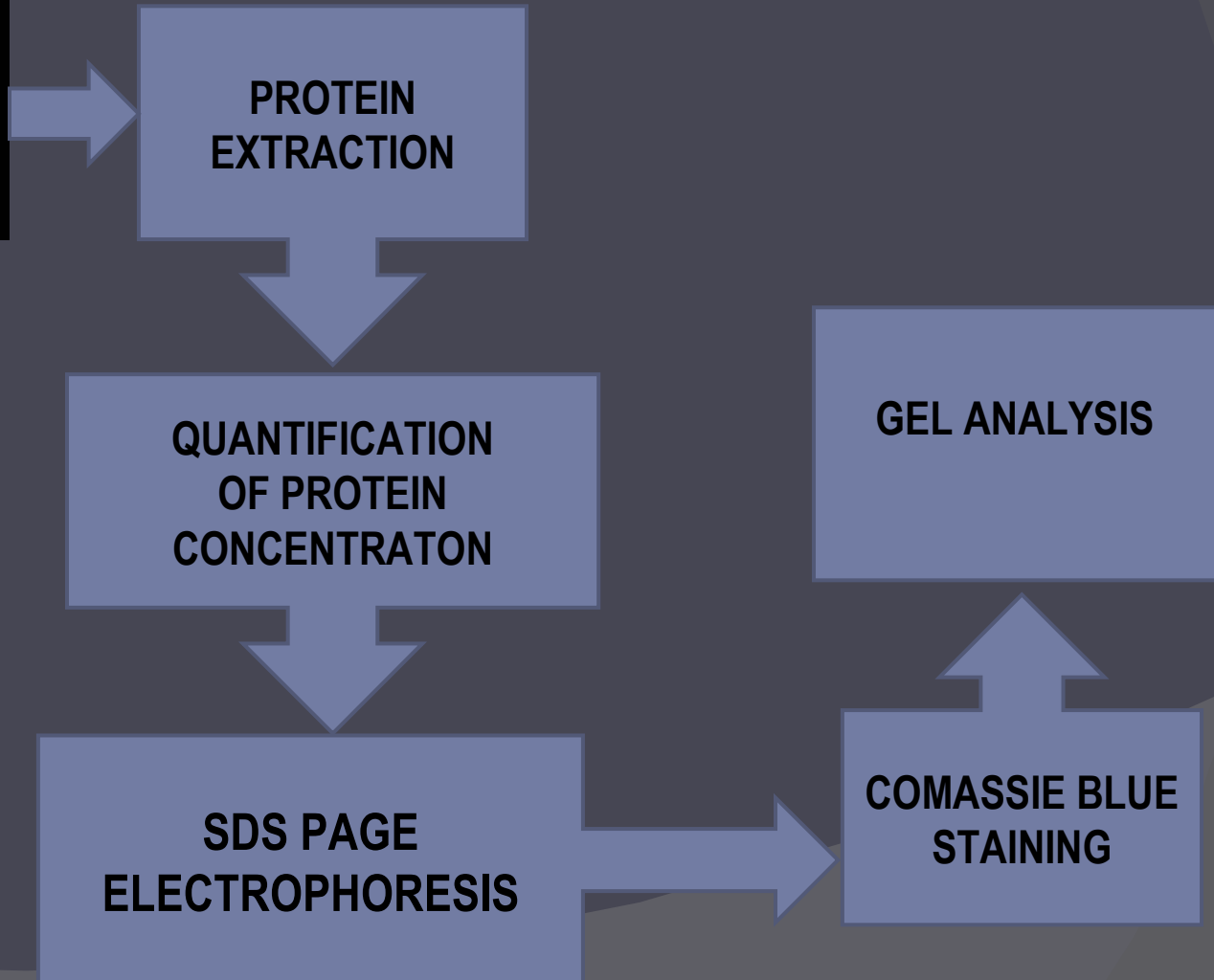
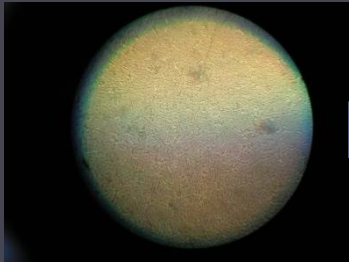
HSC-3 cell line



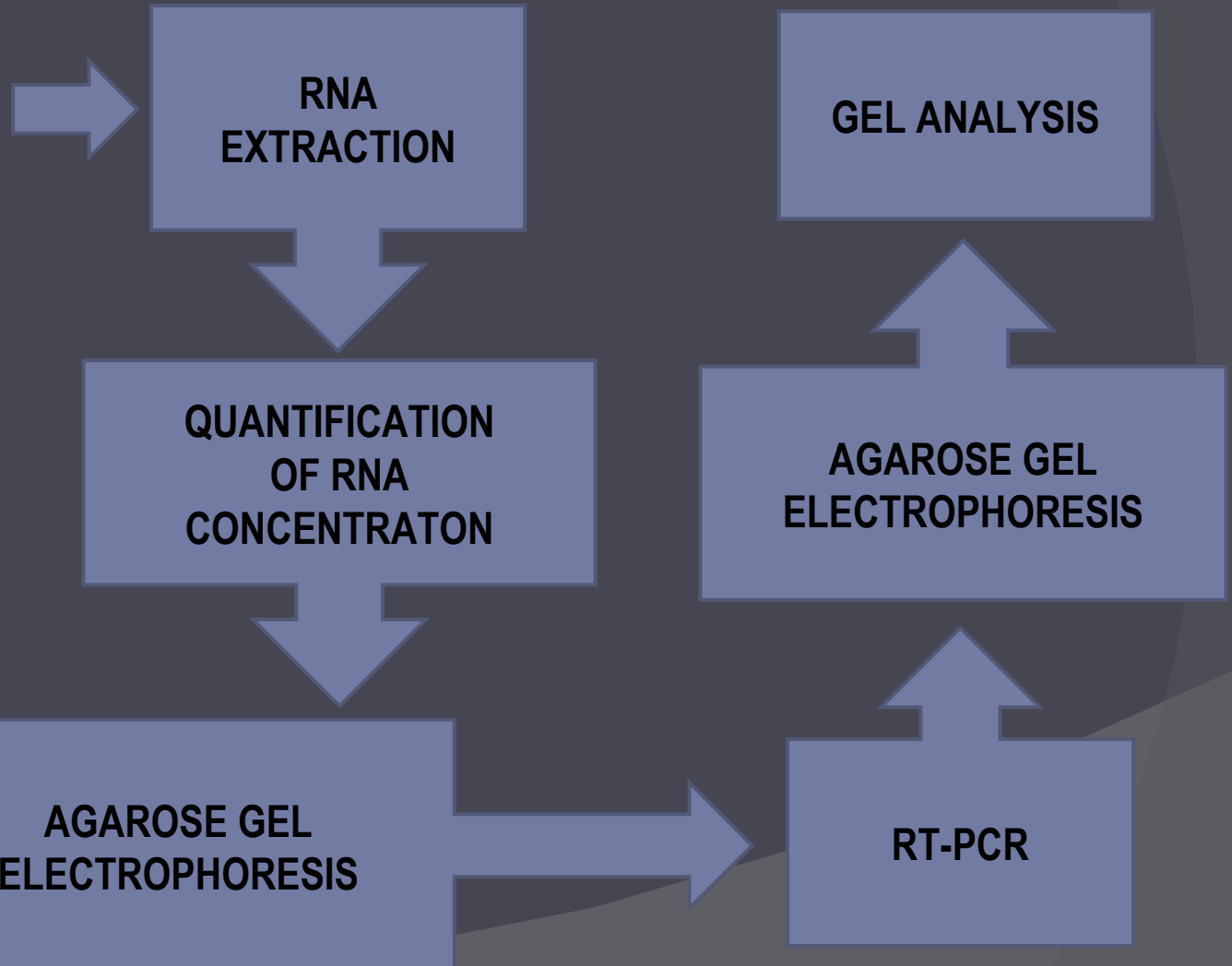
HSC-4 cell line

The two cell lines were cultured in DMEM supplemented with 10% FCS with the presence of antibiotic and antifungal at 37°C with 95% humidity and 5% CO₂.

PROTEIN ANALYSIS

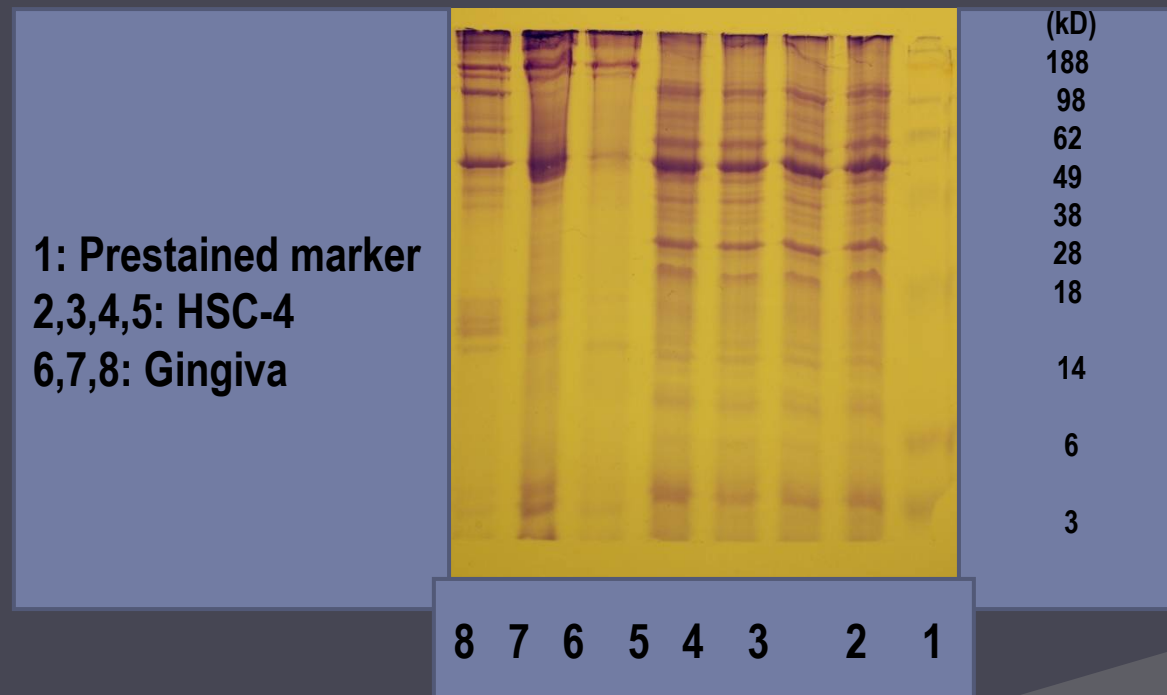


mRNA ANALYSIS



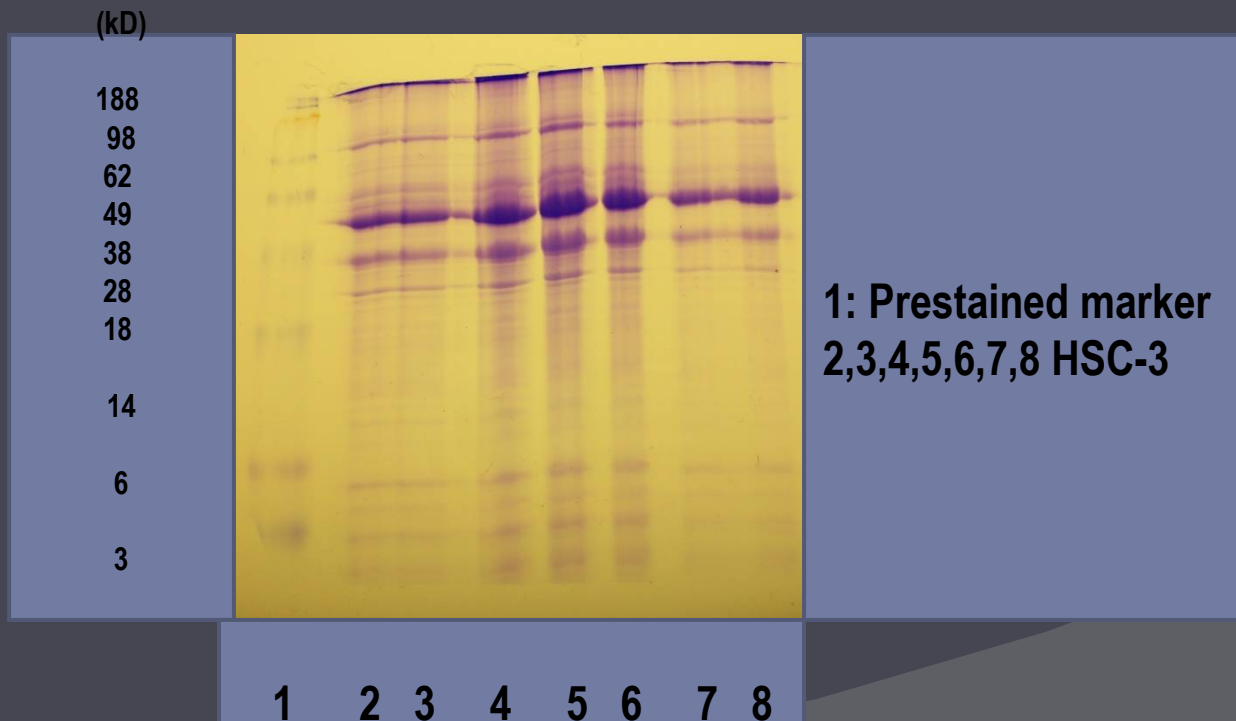
RESULTS

- Protein TAp73 = 70kD
- HSC-4 cell line



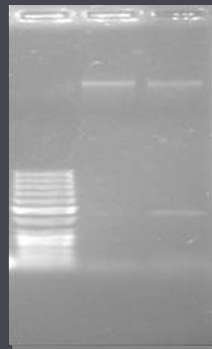
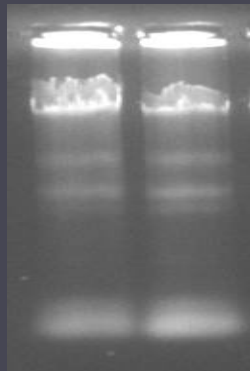
RESULTS

- ⦿ Protein TAp73 =70kD
- ⦿ HSC-3 cell line

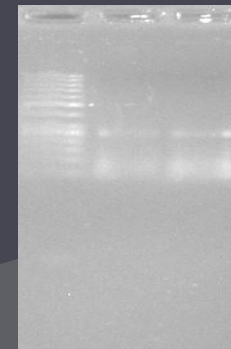


RESULTS

Name	Primers	PCR Condition	Product
TAp73	F 5-GGC TGC GAC GGC TGC AGA GC-3	1X 94°C 5 mins 35X 94°C 30 secs 60°C 40 secs 72°C 30 secs	257 bp
	R 5-GCT CAG CAG ATT GAA CTG GGC CAT-3	1X 72°C 10 mins	
GADPH	F 5-CAC AGT CCA TGC CAT CAC-3	1X 94°C 5 mins 35X 94°C 30 secs 57°C 30 secs 72°C 30 secs	447 bp
	R 5-CAC CAC CCT GTT GCT GTA-3	1X 72°C 10 mins	



← Produk PCR
GADPH (447bp)



← Produk PCR
TAp73 (257bp)

CONCLUSION

◎ Initial results:

1. Expression of the expected TAp73 (70kD) band in HSC-4 (with mutant P53 protein) was higher than in HSC-3 (no P53 protein) → related to its characteristic in terms of telomerase activity of this cell line?
2. Expression in the RNA level need to be optimised and quantified → brighter bands

CONCLUSION

◎ Future work:

1. Western blot: making sure the presence of 70kD TAp73
2. Identification of hTERT expression in relation to TAp73 expression

REFERENCES

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- ◎ T Stiewe, S Tuve, M Peter, A Tannapfel, et al. *Clin Cancer Res* (2004) 10, 626-633.

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THANK YOU