

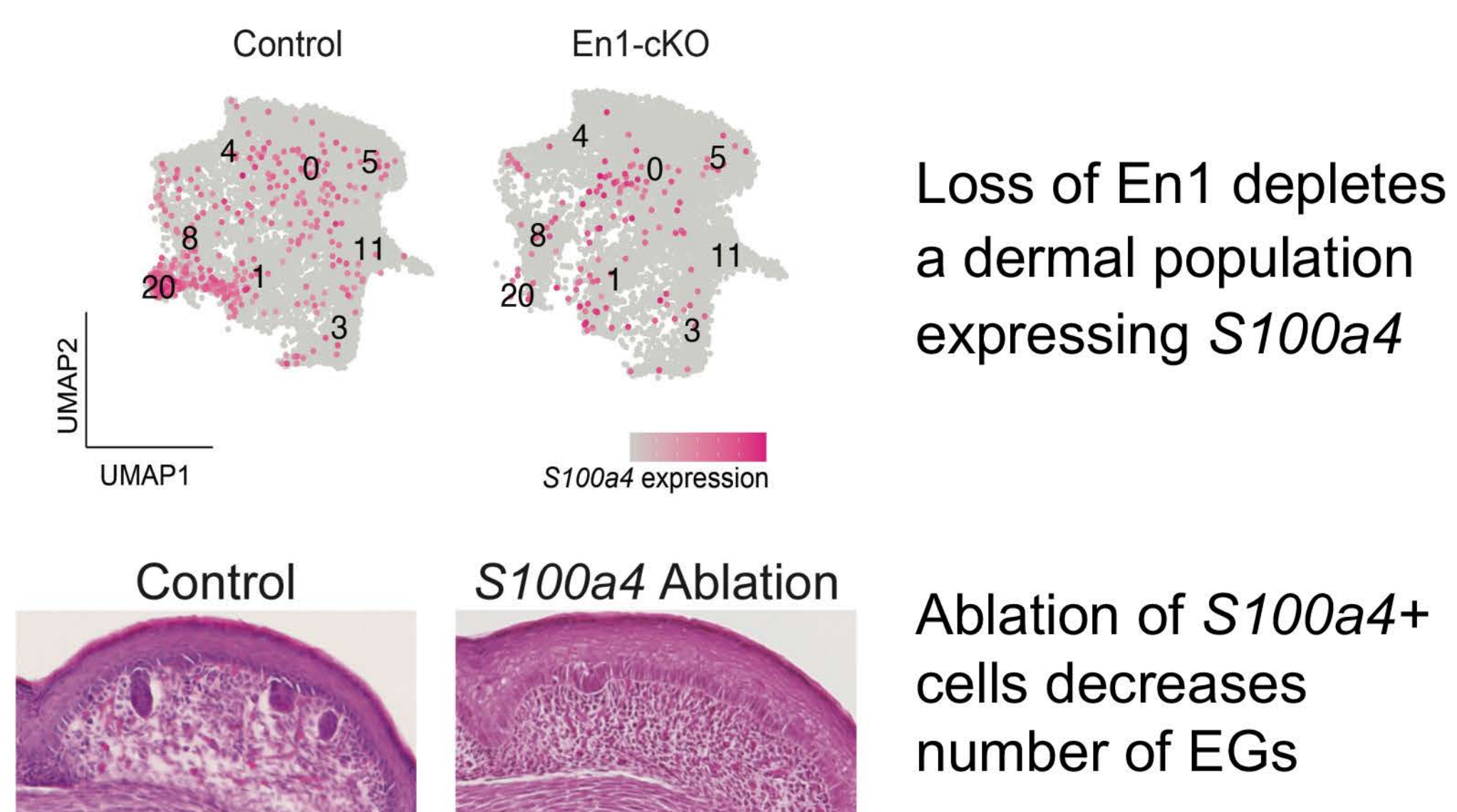
# *S100a4* expression during eccrine gland development

Serenity M. Martinez, Heather L. Dingwall, Yana G. Kamberov  
Dept. of Genetics, Dept. of Dermatology, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA USA

## Introduction

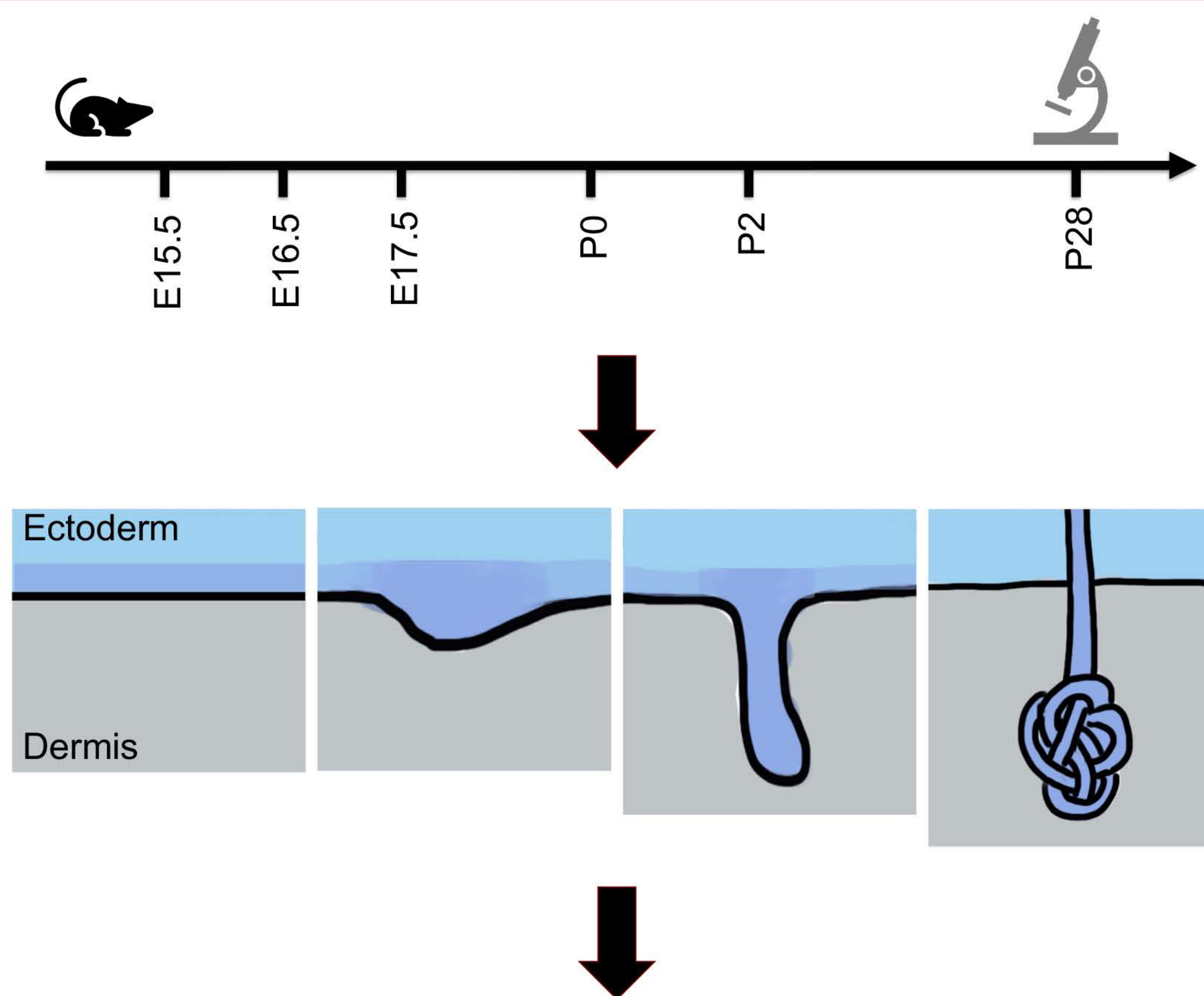
- Eccrine glands (EGs) perform several vital functions including secretion of sweat, excretion of wastes, and maintenance of body temperature.
- EGs have limited ability to regenerate after full-thickness damage like deep burns, and there are no treatments available for patients with irreversible loss of sweat glands.
- Engrailed 1 (*En1*) is necessary for EG development.

## Background



What is the timing of *S100a4* expression?

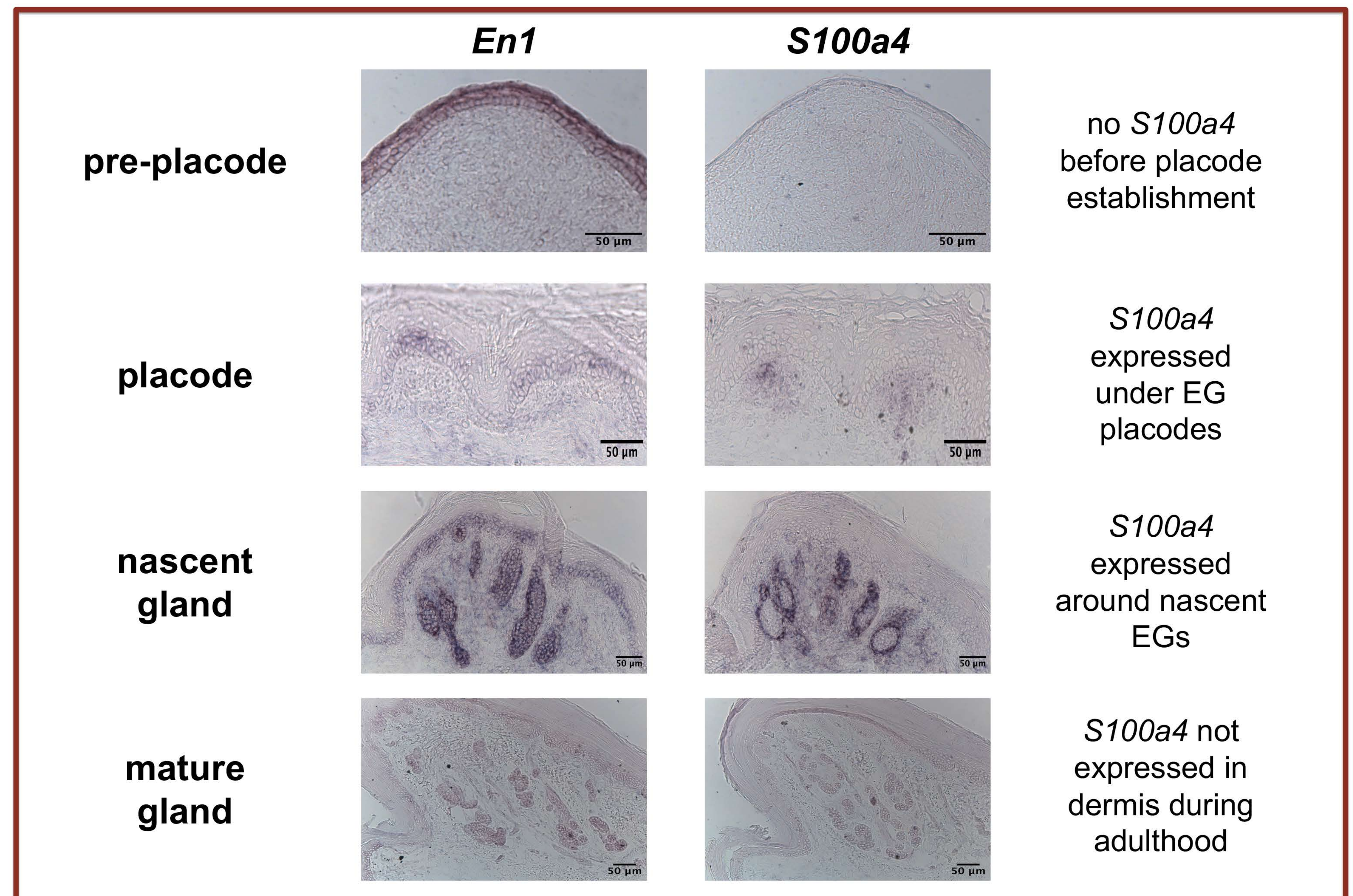
## Methods



### *In situ* hybridization

Detection and precise localization of a specific RNA sequence within a tissue section

## Results



## Conclusion

*S100a4* expression in the dermis is only associated with developing eccrine glands.

## Future Directions

- Further research into when the tissue ceases to express *S100a4*.
- Conduct lineage tracing to find out if the cells are still there, have migrated, changed functions, or died.
- Knowing more about *S100a4*<sup>+</sup> cells can potentially help with regenerative medicine.

## References

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