University of Groningen

Functions of the C/EBP β isoforms in breast cancer

Sterken, Britt

DOI:
[10.33612/diss.172465560](https://doi.org/10.33612/diss.172465560)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2021

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Sterken, B. (2021). *Functions of the C/EBP β isoforms in breast cancer*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.172465560>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Functions of the C/EBP β isoforms in breast cancer

**rijksuniversiteit
groningen**

Functions of the C/EBP β isoforms in breast cancer

Proefschrift

ter verkrijging van de graad van doctor aan de
Rijksuniversiteit Groningen
op gezag van de
rector magnificus prof. dr. C. Wijmenga
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op

21 juni 2021 om 16.15 uur

door

Britt Amber Sterken

geboren op 19 januari 1992
te Groningen

Promotor

Prof. dr. C.F.Calkhoven

Copromotor

Dr. M. Demaria

Beoordelingscommissie

Prof. dr. F. Kuipers

Prof. dr. H. Morrison

Prof. dr. F. Foijer

Contents

Chapter I: Aim and outline of the thesis	1
Chapter II: Translational regulation and functions of the C/EBP β -isoforms in mammary gland development, breast cancer and the cancer microenvironment	5
Chapter III: C/EBP β isoform-specific regulation of migration and invasion in triple-negative breast cancer cells	29
Chapter IV: Conditional CAG-promoter driven expression of C/EBP β -LIP or C/EBP β -LAP from the <i>Col1a1</i> -locus is epigenetically silenced in mice, and <i>Trp53</i> -deficient breast cancer latency and growth is not correlated to LIP/LAP isoform ratio	61
Chapter V: Generation of <i>Cebpb</i> ^{ΔuORF} mice that are deficient in C/EBP α -p30	87
Chapter VI: Discussion and perspectives	109
Appendices: A. Scientific Summary	126
B. Wetenschappelijke samenvatting	127
C. Lay summaries	129
D. Acknowledgements	131