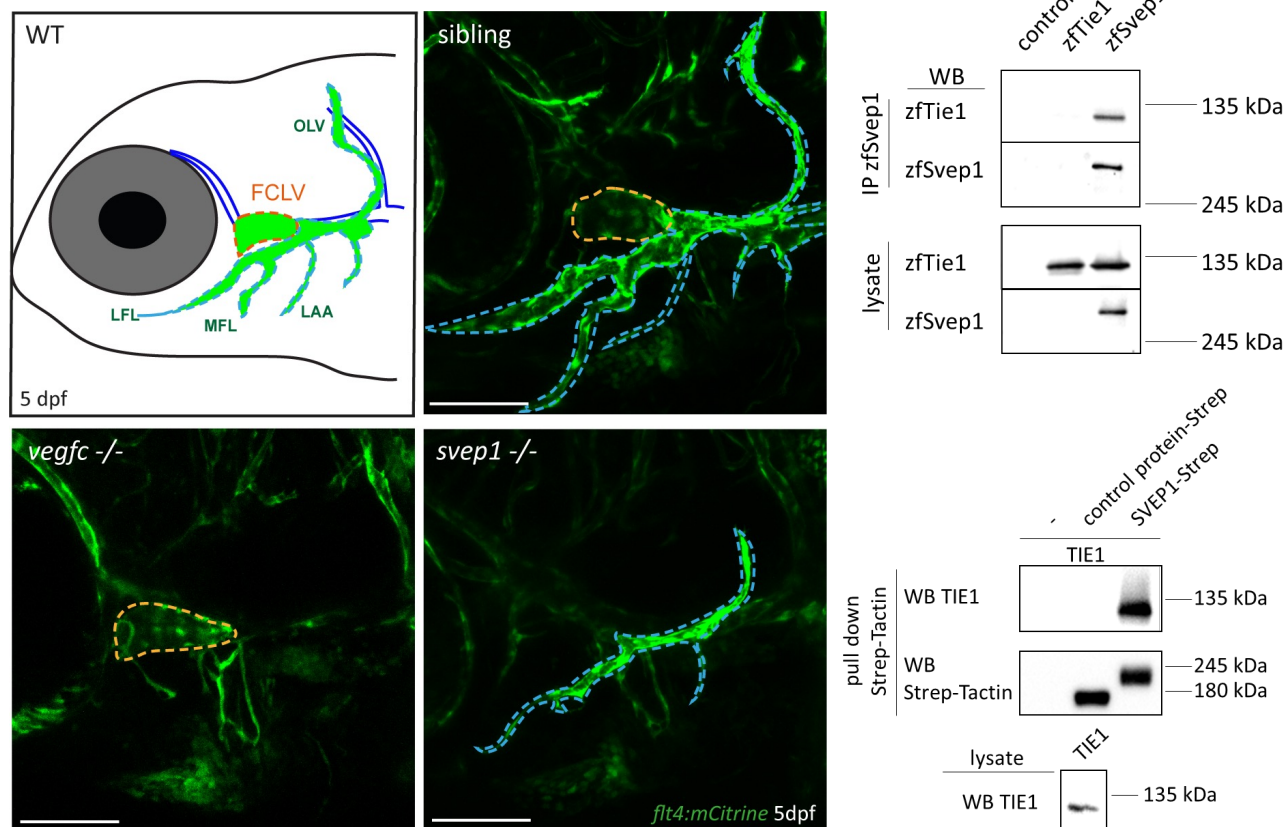


Svep1 is a binding ligand of Tie1 and affects specific aspects of facial lymphatic development in a Vegfc-independent manner

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Key findings:

- Svep1 is required for formation of a specific subpopulation (FCLV, red stipples) of the facial lymphatic network and can act in a Vegfc independent manner
- in contrast to *Tie2* mutant mice, zebrafish *tie2* mutants do not show any early lymphatic defects
- loss of either *svep1* or *tie1* results in identical lymphatic defects in the head and trunk vasculature
- *tie1* mutants show an exacerbated lymphatic phenotype in the trunk vasculature in a *svep1* dose dependent manner, indicating genetic interaction
- zebrafish/human SVEP1 protein binds to the Tie1/TIE1 receptor, respectively