



### KEY WORDS

- ✓ Östrojen reseptörü
- ✓ Fenoksin
- ✓ R-Spondin
- ✓ Hipotalamus
- ✓ İmmünohistokimya

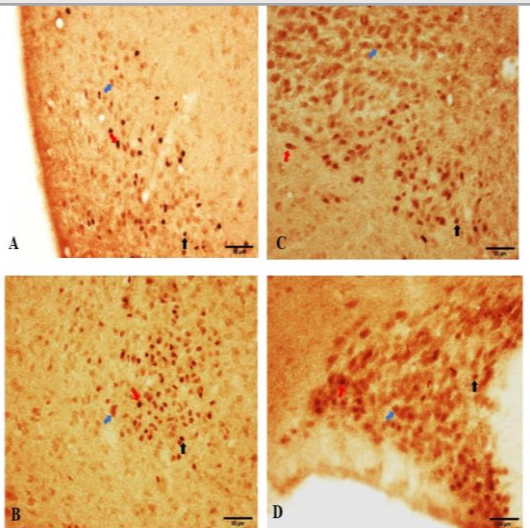
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# IMMUNOHISTOCHEMICAL DETERMINATION OF ESTROGEN RECEPTOR EXPRESSION IN ANOREXIGENIC PEPTIDE SYNTHESIZING NEURONS

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### THESIS ABSTRACT

This study aimed to determine whether neurons synthesizing anorexigenic peptides express ER- $\alpha$  and/or ER- $\beta$  receptors to receive peripheral estrogen signals and to determine changes in the amount of receptors according to the amount of estrogen. For this purpose, colocalization of ER- $\alpha$ , ER- $\beta$  with phoenixin, RSPO-1 and RSPO-3 neurons was investigated using double immunohistochemical technique on floating sections.

### APPLICATION AREAS OF THE THESIS RESULTS

There has been pioneering work to understand the effects of estrogen signaling on food intake in the treatment of obesity.

### ACADEMIC ACTIVITIES

Immunohistochemical localization of R-Spondin expressing neurons in the rat hypothalamus. Coşkan N, Gök Yurtseven D, Eyigör Ö. NICHE2022, 15th National and 1st International Congress of Histology and Embryology, Ankara, Türkiye, 26 Mayıs 2022, Abstract Book, pp.134.

Hasanoğlu-Akbulut, N., Koç, C., Salman, B., Coşkan, N., Ermiş, E. Topal G., Eyigör, Ö., & Cansev, M. (2023). Effects of centrally administered uridine triphosphate and receptor antagonist on the activation of nesfatin-1 neurons. (2023). 21st National Neuroscience Congress, pp.210. Bolu, Türkiye.

Hasanoğlu-Akbulut, N., Koç, C., Salman, B., Topal G., Coşkan, N., Ermiş, E., Cansev, M., & Eyigör, Ö. M. (2023). Effects of centrally administered uridine triphosphate and p2y2 receptor antagonist on activation of vasopressin and oxytocin neurons. 26th National Electron Microscopy Congress, pp.81. Eskişehir, Türkiye.

Yurtseven Gok, D., Coskan N., Topal, G., Hasanoglu Akbulut, N., & Eyigor, O. (2023). The Localization of R-Spondin1 and R-Spondin 3 Peptides in Rat Hypothalamus: An Immunohistochemical Study. International Journal of Morphology, 41(6), 1808-1815.

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