AGER-1,2,3 bind AGEs

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references


Reactome database release: 83

This document contains 1 reaction (see Table of Contents)

https://reactome.org
In addition to AGER/RAGE, several other proteins have been identified as AGE-binding proteins. AGE binding proteins p60 and p90 (Yang et al. 1991) were subsequently identified as the Oligosaccharyl transferase 48 kDa subunit (Ost-48) and Glucosidease-2 subunit beta (Li et al. 1996). A third member was identified as Galectin-3 (Vlassara et al. 1995). These 3 proteins have been shown to be present on the plasma membrane of many cell types including vascular endothelium (Stitt et al. 1999). They have been designated AGE-R1, -R2 and -R3. Their suggested function is the removal and degradation of AGEs, but AGER-1 was found to negatively regulate AGER/RAGE (Lu et al. 2004), with kinetics that suggested a more complex interaction than simple competition for the same ligand.

**Literature references**
