Paired box protein Pax-6, also known as aniridia type II protein (AN2) or oculorhombin, is a protein that in humans is encoded by the PAX6 gene.

Pax6 is a transcription factor present during embryonic development. The encoded protein contains two different binding sites that are known to bind DNA and function as regulators of gene transcription. It is a key regulatory gene of eye and brain development. Within the brain, the protein is involved in development of the specialized cells that process smell. As a transcription factor, Pax6 activates and/or deactivates gene expression patterns to ensure for proper development of the tissue. Mutations of the Pax6 gene are known to cause various disorders of the eyes. Two common disorders associated with a mutation are: aniridia, the absence of the iris, and Peters' anomaly, thinning and clouding of the cornea. Scientists have created a “tae” model using mice during which time the mouse does not express Pax6. The “knockout” model is eyeless or has very underdeveloped eyes further indicating Pax6 is required for proper eye development.