

# Monoclonal antibody effective therapy for diabetic retinopathy

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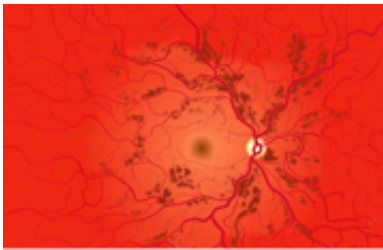


Image courtesy of Blausen Medical

An antibody can reduce retinal vascular leakage and inflammation in rat models of diabetic retinopathy, according to a study published online Oct. 1 in *Diabetes*.

(HealthDay)—An antibody can reduce retinal vascular leakage and inflammation in rat models of diabetic retinopathy, according to a study published online Oct. 1 in *Diabetes*.

Kyungwon Lee, from the University of Oklahoma Health Sciences Center in Oklahoma City, and colleagues investigated the effect of a monoclonal antibody targeting the E1E2 domain of Wnt coreceptor low-density lipoprotein receptor-related protein 6 (Mab2F1) on [diabetic retinopathy](#) in vitro and in vivo.

The researchers found that Mab2F1 inhibited Wnt signaling in [retinal pigment](#) epithelial cells. Mab2F1 also reduced the levels of  $\beta$ -catenin as well as angiogenic and inflammatory factors induced by high-glucose

medium in retinal endothelial cells. In rat models of ischemia-induced retinopathy and streptozotocin-induced diabetes, Mab2F1 significantly reduced retinal vascular leakage.

"In conclusion, Mab2F1 inhibits canonical Wnt signaling, vascular leakage, and inflammation in the retina of diabetic retinopathy models, suggesting its potential to be used as a therapeutic agent in combination with other antiangiogenic compounds," Lee and colleagues write.

**More information:** [Abstract](#)  
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