

Nonclinical drug candidates targeting TRAP1 to treat diabetic retinopathy

SMARTIN BIO Inc.



OPHTHALMOLOGY	Candidate
Product Type	Chemical product
Indication	Proliferative diabetic retinopathy (PDR), non-proliferative diabetic retinopathy (NPDR), diabetic macular edema
Target	TRAP1 (mitochondrial chaperone)
MoA (Mechanism of Action)	TRAP1 inhibition → opening of mitochondrial permeability transition pore (low conductance) → calpain-1 activation → proteolysis of HIF1
Competitiveness	High potency: inactivation of multiple disease-causing angiogenic factors simultaneously. Convenient topical administration: efficient drug penetration to retina by eye drop application
Development Stage	Candidate
Route of Administration	Topical administration (eye drop)