



# IHCeasy RD3 Ready-To-Use IHC Kit

Catalog Number: KHC2619

General Information

Sample type: FFPE tissue Cited sample type: Reactivity: Human, Mouse Cited Reactivity: Assay type: Immunohistochemistry Primary antibody type: Rabbit Polyclonal

Secondary antibody type: Polymer-HRP-Goat anti-Rabbit

#### Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

#### Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

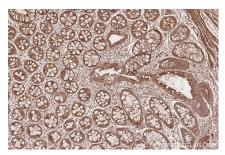
# Background

RD3, or Retinal Degeneration 3, plays a critical role in regulating guanylate cyclase (GC) signaling and photoreceptor cell survival. RD3 is highly conserved across vertebrates, with the human protein sharing high sequence identity with other primates and varying degrees of identity with other species. The main functions of RD3 include inhibiting photoreceptor-specific guanylate cyclase activity and promoting the accumulation of retinal membrane guanylyl cyclase (RetGC) in the photoreceptor outer segment. RD3 is essential for the normal expression of RetGC in photoreceptor cells and blocks RetGC catalytic activity. Mutations in the RD3 gene can lead to Leber congenital amaurosis type 12, which results in retinal degeneration. RD3 is also involved in the trafficking of RetGC from the endoplasmic reticulum to the photoreceptor outer segments, which is crucial for maintaining the normal function and survival of photoreceptors.

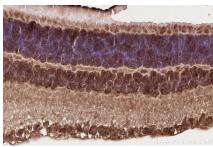
### **Synonyms**

RD3,C1orf36,LCA12,Protein RD3,retinal degeneration

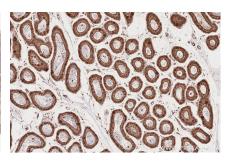
# **Selected Validation Data**



Immunohistochemical analysis of paraffinembedded human rectal cancer tissue slide using KHC2619 (RD3 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse eye tissue slide using KHC2619 (RD3 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse epididymis tissue slide using KHC2619 (RD3 IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using KHC2619 (RD3 IHC Kit).