

# RYK (F35 P7 D7 F5): sc-83082

## BACKGROUND

RYK (related to receptor tyrosine kinase) is a chemorepulsive axon guidance receptor required for establishing major axon tracts, such as the corticospinal tract and the corpus callosum, in the developing nervous system. RYK belongs to the RTK family and is ubiquitously expressed in both developing and adult tissues. Compared to other RTK family members, RYK has a relatively short extracellular domain. In addition, RYK contains two N-terminal leucine-rich motifs that resemble the N-terminal domain of WIF-1. RYK functions as a Wnt receptor and produces a repulsive guidance signal upon binding of Wnt-1, 3, 3a or 5a to its WIF-like domain. The loss of functional RYK results in the formation of contralateral axon bundles and the disruption of cardiac, skeletal and craniofacial development, ultimately resulting in perinatal death. RYK is also strongly expressed in malignant ovarian tumors and may play a role in tumorigenesis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RYK (human) mapping to 3q22.2; Ryk (mouse) mapping to 9 F1.

## SOURCE

RYK (F35 P7 D7 F5) is a mouse monoclonal antibody raised against amino acids 462-475 of RYK of human origin.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RYK (F35 P7 D7 F5) is available conjugated to agarose (sc-83082 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-83082 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-83082 PE), fluorescein (sc-83082 FITC), Alexa Fluor® 488 (sc-83082 AF488), Alexa Fluor® 546 (sc-83082 AF546), Alexa Fluor® 594 (sc-83082 AF594) or Alexa Fluor® 647 (sc-83082 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-83082 AF680) or Alexa Fluor® 790 (sc-83082 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

RYK (F35 P7 D7 F5) is recommended for detection of RYK of mouse, rat, human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for RYK siRNA (h): sc-72221, RYK siRNA (m): sc-72222, RYK shRNA Plasmid (h): sc-72221-SH, RYK shRNA Plasmid (m): sc-72222-SH, RYK shRNA (h) Lentiviral Particles: sc-72221-V and RYK shRNA (m) Lentiviral Particles: sc-72222-V.

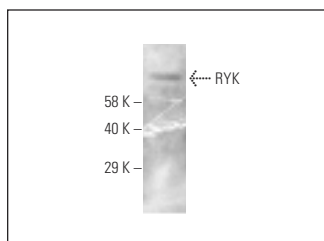
Molecular Weight of RYK: 68 kDa.

Positive Controls: HCT-116 cell extract.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



RYK (F35 P7 D7 F5): sc-83082. Western blot analysis of RYK expression in HCT-116 cell extract.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.