Anti-Ephrin B2 Antibody [JM53-21]

ET1705-33

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell
Molecular Wt:	Predicted band size: 37 kDa
Clone number:	JM53-21

Description: Ephrin-B2 is a protein that in humans is encoded by the EFNB2 gene. This gene encodes a member of the ephrin (EPH) family. The ephrins and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, especially in the nervous system and in erythropoiesis. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. This gene encodes an EFNB class ephrin which binds to the EPHB4 and EPHA3 receptors. EFNB2 gene has been observed progressively downregulated in Human papillomavirus-positive neoplastic keratinocytes derived from uterine cervical preneoplastic lesions at different levels of malignancy. For this reason, EFNB2 is likely to be associated with tumorigenesis and may be a potential prognostic marker for uterine cervical preneoplastic lesions progression.

Immunogen: Synthetic peptide within Human Ephrin B aa 47-96 / 333.

Positive control: SH-SY5Y cell lysate, SK-OV-3 cell lysate, mouse lung tissue lysate, rat brain tissue lysate, HeLa, Neuro-2a, C6.

Subcellular location: Membrane.

Database links: SwissProt: P52799 Human | P52800 Mouse | B2B9A9 Rat

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

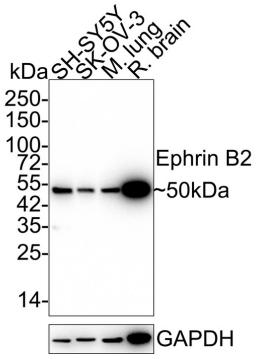

Fig1: Western blot analysis of Ephrin B2 on different lysates with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/2,000 dilution.

Lane 1: SH-SY5Y cell lysate (15 µg/Lane)
Lane 2: SK-OV-3 cell lysate (15 µg/Lane)
Lane 3: Mouse lung tissue lysate (20 µg/Lane)
Lane 4: Rat brain tissue lysate (20 µg/Lane)

Predicted band size: 37 kDa
Observed band size: 50 kDa

Exposure time: 3 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1705-33) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

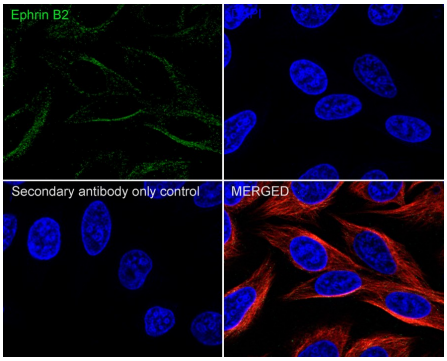

Fig2: Immunocytochemistry analysis of HeLa cells labeling Ephrin B2 with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/100 dilution.

Cells were fixed in 100% precooled methanol for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

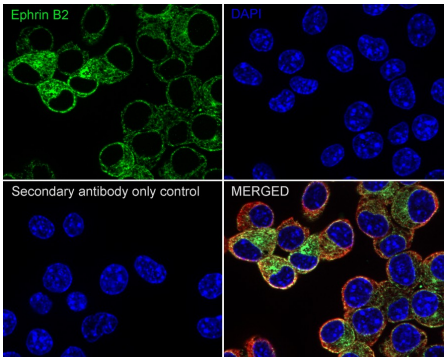

Fig3: Immunocytochemistry analysis of Neuro-2a cells labeling Ephrin B2 with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

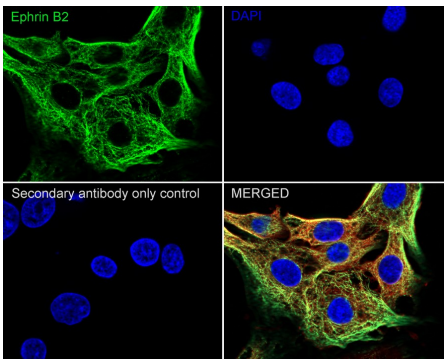

Fig4: Immunocytochemistry analysis of C6 cells labeling Ephrin B2 with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Ephrin B2 antibody (ET1705-33) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Background References

1. Wu S et al. MicroRNA-137 Inhibits EFNB2 Expression Affected by a Genetic Variant and Is Expressed Aberrantly in Peripheral Blood of Schizophrenia Patients. EBioMedicine 12:133-142 (2016).
2. Ma W et al. Synergistic Effect of TPD7 and Berberine against Leukemia Jurkat Cell Growth through Regulating Ephrin-B2 Signaling.Phytother Res doi: 10.1002/ptr.5866 (2017).