

DESCRIPTION

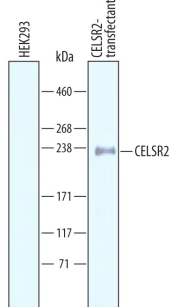
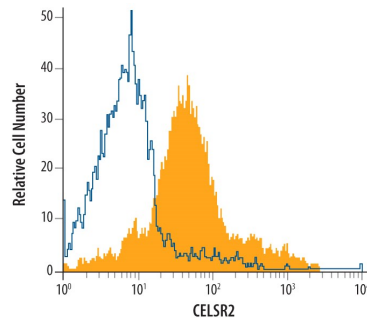
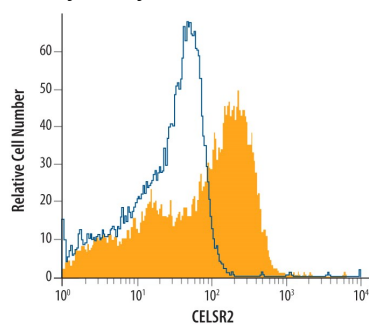
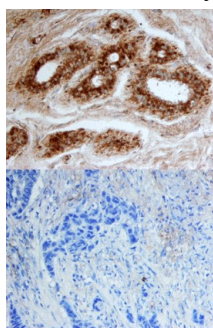
Species Reactivity	Human/Mouse
Specificity	Detects human CELSR2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) CELSR1 and rhCELSR3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CELSR2 Cys51-Phe231 Accession # Q9HCU4
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-15 µg/mL	See Below
CytoF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of CELSR2 by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line either mock transfected or transfected with human CELSR2. PVDF Membrane was probed with 1 µg/mL of Goat Anti-Human CELSR2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6739) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for CELSR2 at approximately 240 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Flow Cytometry</p>  <p>Detection of CELSR2 in SH-SY5Y Human Cell Line by Flow Cytometry. SH-SY5Y human neuroblastoma cell line was stained with Goat Anti-Human CELSR2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6739, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108).</p>
<p>Flow Cytometry</p>  <p>Detection of CELSR2 in bEnd.3 Mouse Cell Line by Flow Cytometry. bEnd.3 mouse endothelioma cell line was stained with Goat Anti-Human CELSR2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6739, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108).</p>	<p>Immunohistochemistry</p>  <p>CELSR2 in Human Breast. CELSR2 was detected in immersion fixed paraffin-embedded sections of human breast using Goat Anti-Human CELSR2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6739) at 10 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling when primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. Specific staining was localized to ductal epithelium. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CELSR2 (Cadherin EGF LAG seven-pass G-type receptor 2; also cadherin family member 10/CDHF10, Flamingo1 and EGFL2) is a 300-330 kDa member of the LN-7TM subfamily, GPCR 2 family of proteins. It is expressed on neurons, breast epithelium, Sertoli cells and germ cells, and through homophilic interactions, serves as either an adhesion or guidance molecule. Mature human CELSR2 is 2892 amino acids in length (aa 32-2923). It is a highly complex 7-transmembrane protein that contains a 2349 aa extended N-terminal extracellular region (aa 32-2380) plus a 310 aa C-terminal cytoplasmic domain. The N-terminal region contains nine consecutive cadherin domains (aa 182-1146) followed by a mixture of seven EGF-like and three laminin-like domains. There is a proteolytic cleavage site between Met2356-Thr2357 that generates a 250 kDa soluble fragment and a (mature) 60-65 kDa transmembrane segment that may reside on the cell membrane. Over aa 51-231, human CELSR2 shares 93% aa identity with mouse CELSR2.