

## Anti-Human Ephrin Type A receptor 2 [1C1] Standard Size Ab00430-1.7

This antibody is in our proprietary AbFab2™ recombinant F(ab2) format - based on Mouse IgG1 sequence with a short dimerization domain to improve stability and a his tag.

This chimeric mouse antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse F(ab)2, AbFab2™ His-Tagged, Kappa

**Clone Number:** 1C1

**Alternative Name(s) of Target:** EphA2; Epithelial cell kinase; Tyrosine-protein kinase receptor ECK

**UniProt Accession Number of Target Protein:** P29317

**Published Application(s):** agonist, internalizing, WB, ELISA, FC, IF

**Published Species Reactivity:** Human

**Immunogen:** 1C1 was isolated after screening of a non-immunized human Fab phage library. Selection was based on the ability to bind soluble human recombinant EphA2 (residues 183-510). The Fab was subsequently converted to full length human IgG1.

**Specificity:** 1C1 binds specifically to the amino-terminal LBD (ligand-binding domain) region of the EphA2 ectodomain (IgG1 KD ~0.8 nM; Fab KD ~140 nM) and not to other related human Eph receptors such as EphA1, EphA2, and EphA4, or any EphB receptor family members.

**Application Notes:** This antibody binds to human Ephrin type-A receptor 2, a receptor tyrosine kinase that binds to membrane-bound ephrin-A ligands residing on adjacent cells, triggering contact-dependent signaling into neighboring cells. Eph2A is involved in pattern formation during development, angiogenesis and osteoblastogenesis. Eph2A has also been found to be expressed in a variety of cancers. This antibody acts as an agonist of Eph2A signaling. The agonist properties of 1C1 is due to ligand mimicry by VDR3. After cell binding, the antibody is able to induce rapid tyrosine phosphorylation, internalization, and degradation of the EphA2 receptor.

**Antibody First Published in:** Jackson et al. A human antibody-drug conjugate targeting EphA2 inhibits tumor growth in vivo. Cancer Res. 2008 Nov 15;68(22):9367-74. [PMID:19010911](#)

**Note on publication:** Describes the generation of several human antibodies against the human ephrin type A receptor 2 and subsequent crystallography.

## Product Form

**Size:** 100 µg Purified antibody.

**Purification:** Purified by Immobilized Metal Affinity Chromatography

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.