

**HDFP563**

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## Product Information

<b>Product SKU:</b>	HDFP563	<b>Expression Host:</b>	HEK293	<b>Size:</b>	10µg
<b>Target:</b>	CA2D2	<b>Tag:</b>	C-Flag Tag		

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## Additional Information

<b>Conjugate:</b>	Unconjugated	<b>Uniprot ID:</b>	Q9NY47
<b>Molecular Weight:</b>	The human full length CA2D2 protein has a MW of 129.8kDa		

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## Protein Information

**Background:** Calcium channels mediate the entry of calcium ions into the cell upon membrane polarization. This gene encodes the alpha-2/delta subunit of the voltage-dependent calcium channel complex. The complex consists of the main channel-forming subunit alpha-1, and auxiliary subunits alpha-2/delta, beta, and gamma. The auxiliary subunits function in the assembly and membrane localization of the complex, and modulate calcium currents and channel activation/inactivation kinetics. The subunit encoded by this gene undergoes post-translational cleavage to yield the extracellular alpha2 peptide and a membrane-anchored delta polypeptide. This subunit is a receptor for the antiepileptic drug, gabapentin. Mutations in this gene are associated with early infantile epileptic encephalopathy. Single nucleotide polymorphisms in this gene are correlated with increased sensitivity to opioid drugs. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2014]

**Synonyms:** CACNA2D, CASVDD

**Protein Description:** Human CA2D2 full length protein-synthetic nanodisc

**Formulation:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH

below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.

**Protein Pathways:**

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**Protein Families:**

Ion Channels: Other.

**Usage:**

Research use only

**Storage & Shipping:**

Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.