

# Product Information

## MemDX™ Membrane Protein Human ADRA2A (Adrenoceptor alpha 2A) Full Length

Cat. No.: **MPC0028K**

This product is for research use only and is not intended for diagnostic use.

This product is a 50.6 kDa Human ADRA2A membrane protein expressed in Baculovirus/Insect expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

ADRA2A

#### Protein Length

Full length

#### Protein Class

GPCR

#### Molecular Weight

50.6 kDa

#### TMD

7

#### Sequence

MFRQEQLAEGSFAPMGSLQPDAGNASWNGTEAPGGGARATPYSLQVTLT  
LVCLAGLLMLLTVFGNVLVIIAVFTSRALKAPQNLFLVSLASADILVATL  
VIPFSLANEVMGYWYFGKAWCEIYLALDVLCTSSIVHLCAISLDRYWSI  
TQAIEYNLKRTPRRIKAIITVWVISAVISFPPLISIEKKGGGGGPQPAE  
PRCEINDQKWYVISSCIGSFFAPCLIMILVYVRIYQIAKRRTVPVPSRRG  
PDAVAAPPGGTERRPNGLGPERGAGGAEPLPTQLNGAPGEPAPAGP  
RDTDALDLESSSSDHAERPPGPRRPERGPRGKGKARASQVKPGDSLPRR  
GPGATGIGTPAAGPGEERVGAAKASRWGRQNRKRTFVLAVVIGVFVV  
CWFPFFFTYTLTAVGCSVPRTLKFFFWFGYCNSLNPVIYTIFNHDFRR  
AFKKILCRGDRKRIV

### Product Description

#### Expression Systems

Baculovirus/Insect expression system

#### Tag

Based on specific requirements

### **Protein Format**

Detergent or based on specific requirements

### **Form**

Liquid

### **Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

## **Target**

### **Target Protein**

ADRA2A

### **Full Name**

Adrenoceptor alpha 2A

### **Introduction**

Alpha-2-adrenergic receptors are members of the G protein-coupled receptor superfamily. The alpha-2-adrenergic receptors are a type of adrenergic receptors (for adrenaline or epinephrine), which inhibit adenylate cyclase. These receptors include 3 highly homologous subtypes: alpha2A, alpha2B, and alpha2C. They are involved in regulating the release of neurotransmitter molecules from sympathetic nerves and from adrenergic neurons in the central nervous system. The sympathetic nervous system regulates cardiovascular function by activating adrenergic receptors in the heart, blood vessels and kidney. Studies in mouse revealed that both the alpha2A and alpha2C receptor subtypes were required for presynaptic transmitter release from the sympathetic nervous system in the heart and from central noradrenergic neurons. The alpha-2-adrenergic receptors are also involved in catecholamine signaling by extracellular regulated protein kinase 1 and 2 (ERK1/2) pathways. A clear association between the alpha-2-adrenergic receptor and disease has not been yet established.

### **Alternative Names**

ADRA2; ADRAR; ZNF32; ADRA2R; ALPHA2AAR; adrenergic, alpha-2A-, receptor; alpha-2 adrenergic receptor subtype C10; alpha-2-adrenergic receptor, platelet type; alpha-2A adrenoceptor; alpha-2A adrenoreceptor; alpha-2AAR subtype C10; ADRA2A; Adrenoceptor alpha 2A

### **Gene ID**

[150](#)

### **UniProt ID**

[P08913](#)