

## Product datasheet for SC335959

### Adenosine Receptor A2a (ADORA2A) (NM\_001278499) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Adenosine Receptor A2a (ADORA2A) (NM_001278499) Human Untagged Clone
Tag:	Tag Free
Symbol:	ADORA2A
Synonyms:	A2aR; ADORA2; RDC8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335959 representing NM_001278499. Blue=Insert sequence Red=Cloning site Green=Tag(s)

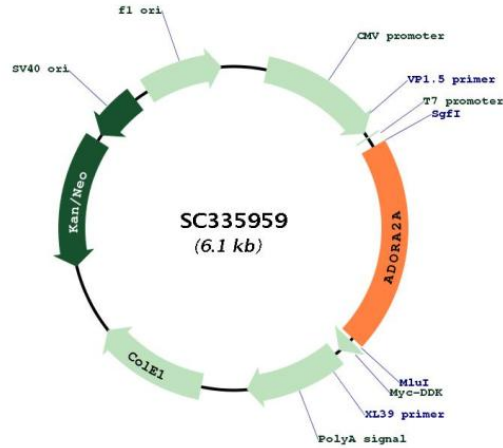
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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCATCATGGGCTCCTCGGTGTACATCACGGTGGAGCTGGCCATTGCTGTGCTGGCCATCCTGGGC
AATGTGCTGGTGTGCTGGGCCGTGTGGCTCAACAGCAACCTGCAGAACGTCACTACTTTGTGGTG
TCACTGGCGGGCCGACATCGCAGTGGGTGTGCTCGCCATCCCCTTTGCCATCACCATCAGCACCGGG
TTCTGCGTGCCTGCCACGGCTGCCTCTTATTGCCTGCTTCGCTCCTGGTCTCACGAGAGCTCCATC
TTCAGTCTCCTGGCCATCGCCATTGACCGCTACATTGCCATCCGCATCCCGCTCCGGTACAATGGCTTG
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TGGGCCAACGGCAGTGTCTCCCAACCTGAGCGGAGGCCAATGGCTATGCCCTGGGGCTGGTGAAGTGA
GGGAGTGCCAAGAGTCCAGGGGAACCGGGCTCCAGACGTGGAGCTCCTTAGCCATGAGCTCAAG
GGAGTGTGCCAGAGCCCTGGCTAGATGACCCCTGGCCAGGATGGAGCAGGAGTGTCTGATG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



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## Plasmid Map:



ACCN: NM\_001278499

Insert Size: 1239 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM\\_001278499.1](#)

RefSeq Size: 2563 bp

RefSeq ORF: 1239 bp

Locus ID: 135

UniProt ID: [P29274](#)

Cytogenetics: 22q11.23

Protein Families: Druggable Genome, GPCR, Transmembrane

<b>Protein Pathways:</b>	Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction
<b>MW:</b>	44.7 kDa
<b>Gene Summary:</b>	<p>This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor (GPCR) superfamily, which is subdivided into classes and subtypes. The receptors are seven-pass transmembrane proteins that respond to extracellular cues and activate intracellular signal transduction pathways. This protein, an adenosine receptor of A2A subtype, uses adenosine as the preferred endogenous agonist and preferentially interacts with the G(s) and G(olf) family of G proteins to increase intracellular cAMP levels. It plays an important role in many biological functions, such as cardiac rhythm and circulation, cerebral and renal blood flow, immune function, pain regulation, and sleep. It has been implicated in pathophysiological conditions such as inflammatory diseases and neurodegenerative disorders. Alternative splicing results in multiple transcript variants. A read-through transcript composed of the upstream SPECC1L (sperm antigen with calponin homology and coiled-coil domains 1-like) and ADORA2A (adenosine A2a receptor) gene sequence has been identified, but it is thought to be non-coding. [provided by RefSeq, Jun 2013]</p> <p>Transcript Variant: This variant (4) differs in the 5' UTR compared to variant 1. Variants, 1, 2, 3, 4, and 5 encode the same protein.</p>