

# Datasheet for ABIN3134352

## DRD4 Protein (AA 1-387) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	DRD4
Protein Characteristics:	AA 1-387
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DRD4 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MGNSSATEDG GLLAGRGPES LGTGAGLGGA GAAALVGGVL LIGLVLAGNS LVCVSVASER
	TLQTPTNYFI VSLAAADLLL AVLVLPLFVY SEVQGGVWLL SPRLCDTLMA MDVMLCTASI
	FNLCAISVDR FVAVTVPLRY NQQGQCQLLL IAATWLLSAA VASPVVCGLN DVPGRDPAVC
	CLENRDYVVY SSVCSFFLPC PLMLLLYWAT FRGLRRWEAA RHTKLHSRAP RRPSGPGPPV
	SDPTQGPFFP DCPPPLPSLR TSPSDSSRPE SELSQRPCSP GCLLADAALP QPPEPSSRRR
	RGAKITGRER KAMRVLPVVV GAFLVCWTPF FVVHITRALC PACFVSPRLV SAVTWLGYVN
	SALNPIIYTI FNAEFRSVFR KTLRLRC
	Sequence without tag. The proposed Strep-Tag is based on experience s with the expression
	system, a different complexity of the protein could make another tag necessary. In case you
	have a special request, please contact us.
Characteristics:	Key Benefits:

- Made in Germany from design to production by highly experienced protein experts.
- · Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- · State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
  protein production are removed, leaving only the protein production machinery and the
  mitochondria to drive the reaction. During our lysate completion steps, the additional
  components needed for protein production (amino acids, cofactors, etc.) are added to
  produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- · We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made
Target Details	
Target:	DRD4

### Target Details

Alternative Name:	Drd4 (DRD4 Products)
Background:	D(4) dopamine receptor (D(2C) dopamine receptor) (Dopamine D4 receptor), FUNCTION:  Dopamine receptor responsible for neuronal signaling in the mesolimbic system of the brain, at area of the brain that regulates emotion and complex behavior. Activated by dopamine, but also by epinephrine and norepinephrine, and by numerous synthetic agonists and drugs. Agonist binding triggers signaling via G proteins that inhibit adenylyl cyclase (By similarity). Modulates the circadian rhythm of contrast sensitivity by regulating the rhythmic expression of NPAS2 in the retinal ganglion cells (PubMed:24048828). {ECO:0000250 UniProtKB:P21917, ECO:0000269 PubMed:24048828}.
Molecular Weight:	41.5 kDa
UniProt:	P51436
Pathways:	cAMP Metabolic Process, Synaptic Membrane, Proton Transport, Photoperiodism, Negative Regulation of Transporter Activity
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.  During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce
	something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only
Handling	
Format:	Liquid

### Handling

Buffer:	The buffer composition is at the discretion of the manufacturer.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months