

PSD95 Protein, Rat (His)

Cat. No.:	HY-P71010
Synonyms:	Disks large homolog 4; Postsynaptic density protein 95; PSD-95; Synapse-associated protein 90; SAP-90; SAP90; PSD95; DLG4
Species:	Rat
Source:	E. coli
Accession:	NP_062567 (M1-L724)
Gene ID:	29495
Molecular Weight:	100-110 kDa

PROPERTIES

AA Sequence

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M D C L C I V T T K   K Y R Y Q D E D T P   P L E H S P A H L P   N Q A N S P P V I V
N T D T L E A P G Y   E L Q V N G T E G E   M E Y E E I T L E R   G N S G L G F S I A
G G T D N P H I G D   D P S I F I T K I I   P G G A A A Q D G R   L R V N D S I L F V
N E V D V R E V T H   S A A V E A L K E A   G S I V R L Y V M R   R K P P A E K V M E
I K L I K G P K G L   G F S I A G G V G N   Q H I P G D N S I Y   V T K I I E G G A A
H K D G R L Q I G D   K I L A V N S V G L   E D V M H E D A V A   A L K N T Y D V V Y
L K V A K P S N A Y   L S D S Y A P P D I   T T S Y S Q H L D N   E I S H S S Y L G T
D Y P T A M T P T S   P R R Y S P V A K D   L L G E E D I P R E   P R R I V I H R G S
T G L G F N I V G G   E D G E G I F I S F   I L A G G P A D L S   G E L R K G D Q I L
S V N G V D L R N A   S H E Q A A I A L K   N A G Q T V T I I A   Q Y K P E E Y S R F
E A K I H D L R E Q   L M N S S L G S G T   A S L R S N P K R G   F Y I R A L F D Y D
K T K D C G F L S Q   A L S F R F G D V L   H V I D A G D E E W   W Q A R R V H S D S
E T D D I G F I P S   K R R V E R R E W S   R L K A K D W G S S   S G S Q G R E D S V
L S Y E T V T Q M E   V H Y A R P I I I L   G P T K D R A N D D   L L S E F P D K F G
S C V P H T T R P K   R E Y E I D G R D Y   H F V S S R E K M E   K D I Q A H K F I E
A G Q Y N S H L Y G   T S V Q S V R E V A   E Q G K H C I L D V   S A N A V R R L Q A
A H L H P I A I F I   R P R S L E N V L E   I N K R I T E E Q A   R K A F D R A T K L
E Q E F T E C F S A   I V E G D S F E E I   Y H K V K R V I E D   L S G P Y I W V P A
R E R L

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Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.2 µm filtered solution of 50 mM Tris-HCl, 100 mM NaCl, 1 mM EDTA, 1 mM DTT, pH 7.5.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION**Background**

PSD95 Protein plays a crucial role in various functions, including PDZ domain binding, enzyme binding, and signaling receptor binding. It serves as a structural component of the postsynaptic density and is involved in processes such as modulation of chemical synaptic transmission, positive regulation of cellular component organization, and postsynapse organization. It is located in different cellular components, including the dendrite, juxtaparanode region of the axon, and postsynaptic density. PSD95 Protein is active in glutamatergic synapses and serves as an anchored component of the postsynaptic density membrane. It colocalizes with the postsynaptic membrane and is identified as a biomarker in Parkinson's disease and temporal lobe epilepsy. In humans, mutations in the orthologous DLG4 gene have been linked to autosomal dominant non-syndromic intellectual disability. [provided by Alliance of Genome Resources, Apr 2022] PSD95 Protein exhibits biased expression in the brain (RPKM 195.0), adrenal gland (RPKM 29.1), and seven other tissues.

Caution: Product has not been fully validated for medical applications. For research use only.

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