10320 Camino Santa Fe, Suite G
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KD-Validated Anti-Serine Racemase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1728

Specification

KD-Validated Anti-Serine Racemase Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q9GZT4
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 37 kDa , observed , 34-36 kDa KDa**
Gene Name	**SRR**
Aliases	**SRR; Serine Racemase; ILV1; ISO1; D-Serine Ammonia-Lyase; L-Serine Ammonia-Lyase; D-Serine Dehydratase; L-Serine Dehydratase; EC 5.1.1.18; EC 4.3.1.18; EC 4.3.1.17**
Immunogen	**A synthesized peptide derived from human Serine racemase**

KD-Validated Anti-Serine Racemase Rabbit Monoclonal Antibody - Additional Information

Gene ID	**63826**

Other Names
Serine racemase, 5.1.1.18, D-serine ammonia-lyase, D-serine dehydratase, 4.3.1.18, SRR

KD-Validated Anti-Serine Racemase Rabbit Monoclonal Antibody - Protein Information

Name SRR

Function
Catalyzes the synthesis of D-serine from L-serine (PubMed:20106978, PubMed:23391306, PubMed:29277459). D-serine is a key coagonist with glutamate at NMDA receptors. Has dehydratase activity towards both L-serine and D-serine (By similarity).

Tissue Location
Expressed in the cerebellum, hippocampus, dorsolateral prefrontal cortex, and in motor neurons and glial cells of the lumbar spinal cord (at protein level) (PubMed:17880399, PubMed:24138986). Increased in the dorsolateral prefrontal cortex of schizophrenic patients (at protein level) (PubMed:17880399). Brain: expressed at high levels in hippocampus and corpus callosum, intermediate levels in substantia nigra and caudate, and low levels in amygdala, thalamus, and subthalamic nuclei (PubMed:15193426). Expressed in heart, skeletal muscle, kidney, and liver (PubMed:15193426)

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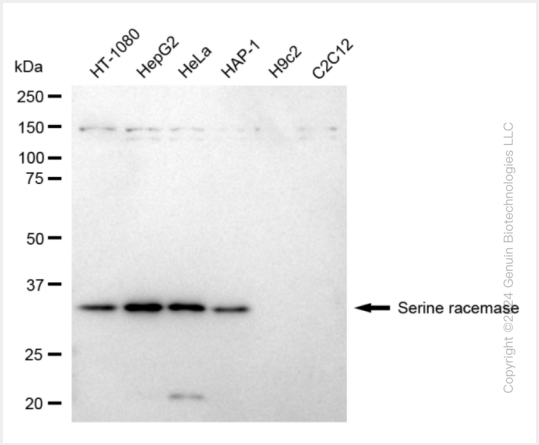
KD-Validated Anti-Serine Racemase Rabbit Monoclonal Antibody - Protocols

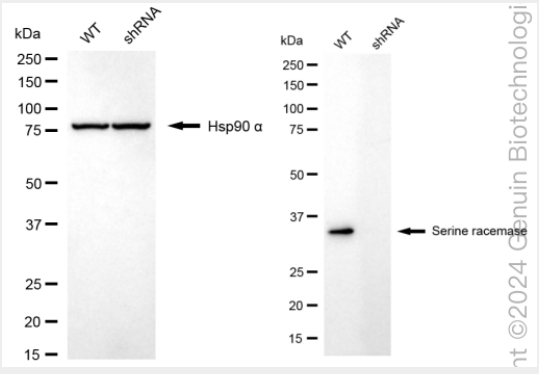
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Serine Racemase Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Serine racemase antibody (Cat#AGI1728). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Serine racemase antibody (Cat#AGI1728, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Serine racemase antibody (Cat#AGI1728). Serine racemase expression in wild type (WT) and Serine racemase shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Serine racemase antibody (Cat#AGI1728, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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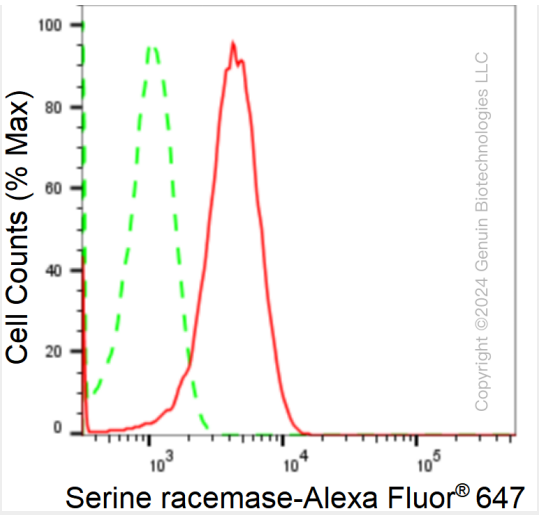
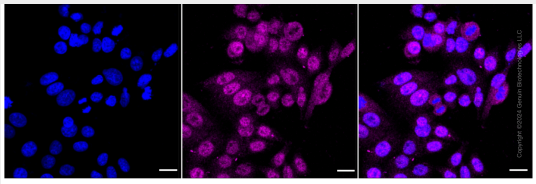


Flow cytometric analysis of Serine racemase expression in HepG2 cells using anti-Serine racemase antibody (Cat#AGI1728, 1:2,000). Green, isotype control; red, Serine racemase.



Immunocytochemical staining of HepG2 cells with anti-Serine racemase antibody (Cat#AGI1728, 1:1,000). Nuclei were stained blue with DAPI; Serine racemase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.