

DESCRIPTION

Source Chinese Hamster Ovary cell line, CHO-derived human Stabilin-2 protein
Ser20-Thr2458, with a C-terminal 6-His tag
Accession # Q8WWQ8.3

N-terminal Sequence Analysis Ser20

Predicted Molecular Mass 265 kDa

SPECIFICATIONS

SDS-PAGE 260-300 kDa, under reducing conditions.

Activity Measured by its binding ability in a functional ELISA.
When Recombinant Human Stabilin-2 His-tag Protein is immobilized at 2.00 µg/mL (100 µL/well), Biotinylated Hyaluronan binds with an ED₅₀ of 1.50-7.50 ng/mL.

Endotoxin Level <1.0 EU per 1 µg of the protein by the LAL method.

Purity >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

Formulation Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 500 µg/mL in PBS.

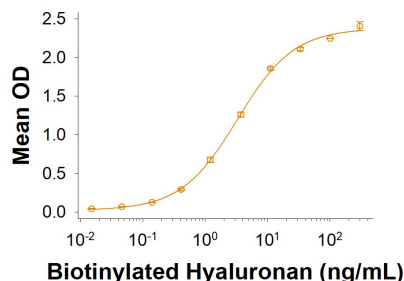
Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

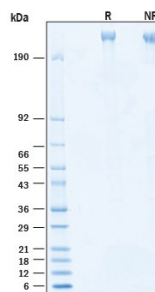
DATA

Binding Activity



Recombinant Human Stabilin-2 His-tag Protein Binding Activity. When Recombinant Human Stabilin-2 His-tag Protein (Catalog # 11086-S2) is immobilized at 2.00 µg/mL (100 µL/well), Biotinylated Hyaluronan binds with an ED₅₀ of 1.50-7.50 ng/mL.

SDS-PAGE



Recombinant Human Stabilin-2 His-tag Protein SDS-PAGE. 2 µg/lane of Recombinant Human Stabilin-2 His-tag Protein (Catalog # 11086-S2) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 260-300 kDa.

BACKGROUND

Stabilin-2, also known as HARE (Hyaluronic Acid Receptor for Endocytosis) and FEEL2 (Fasciclin, EGF-like, laminin type EGF-like, and Link domain containing scavenger receptor 2), is a type I transmembrane multidomain protein that is the closest homolog of stabilin1. It is a scavenger receptor that is expressed on sinusoidal endothelial cells of liver, spleen, and lymph node (1, 2). Its 2439 amino acid (aa) extracellular domain contains seven fasciclin domains, multiple EGF-like and laminin type EGF-like domains, and a link domain related to molecules of the TSG6 superfamily (3). The 72 aa cytoplasmic tail of Stabilin2 contains a motif that allows the AP2 classical cargo adaptor to direct cargo into clathrincoated pits (4). Stabilin2 also mediates the endocytosis of chondroitin and chondroitin sulfate, advanced glycosylation endproduct (AGE), collagen Nterminal propeptides and acetylated LDL (4-7). Stabilin-2 has been found to regulate the cancer progression, and high expression of Stabilin-2 was reported to predict poor tumor prognosis in NSCLC (8).

References:

1. Politz, O. *et al.* (2002) *Biochem. J.* **362**:155.
2. Harris, E.N. and F. Cabral (2019) *Biomolecules* **9**:273.
3. Blundell, C.D. *et al.* (2005) *J. Biol. Chem.* **280**:18189.
4. Hansen, B. *et al.* (2005) *Exp. Cell Res.* **303**:160.
5. Harris, E.N. *et al.* (2004) *J. Biol. Chem.* **279**:36201.
6. Harris, E.N. *et al.* (2007) *J. Biol. Chem.* **282**:2785.
7. Tamura, Y. *et al.* (2003) *J. Biol. Chem.* **278**:12613.
8. Yong, J. *et al.* (2021) *Bioengineered* **12**:3426.