



## Synonym

Cadherin-1, CDH1, CD324, E-cadherin, Arc-1, ECAD, LCAM, UVO

## Source

Human E-Cadherin, Fc Tag, premium grade (ECD-H5250) is expressed from human 293 cells (HEK293). It contains AA Gln 23 - Pro 621 (Accession # [AAI41839](#)).

Predicted N-terminus: Gln 23

*It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.*

## Molecular Characterization

E-Cadherin(Gln 23 - Pro 621) AAI41839	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 92.3 kDa. The protein migrates as 100 kDa and 120 kDa (Cadherin), and 48 kDa (Propeptide) under reducing (R) condition (SDS-PAGE) due to different glycosylation.

## Endotoxin

Less than 0.1 EU per µg by the LAL method.

## Sterility

Negative

## Mycoplasma

Negative.

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

## Storage

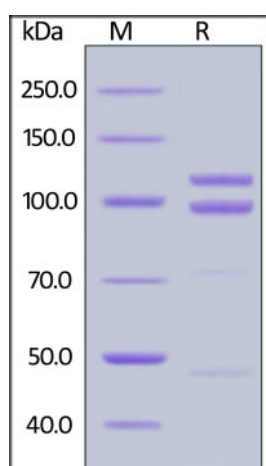
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE

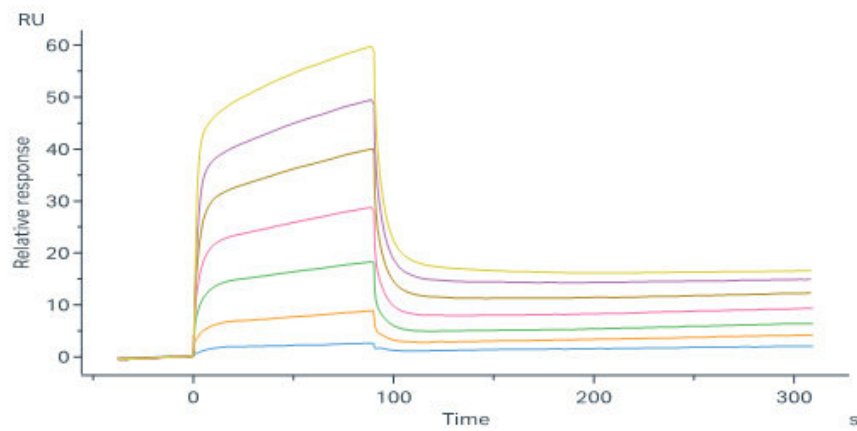


Human E-Cadherin, Fc Tag, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-SPR

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and more!





Human E-Cadherin, Fc Tag (Cat. No. ECD-H5250) immobilized on CM5 Chip can bind Mouse KLRG1, His Tag (Cat. No. KL1-M5249) with an affinity constant of 0.159  $\mu$ M as determined in a SPR assay (Biacore 8K) (QC tested).

## Background

Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. Cadherin-1 (CDH1) is also known as epithelial cadherin (E-cadherin), CD\_antigen (CD324), Uvomorulin (UVO) ECAD and CDHE, CDH1 / CD324 contains 5 cadherin domains. CDH1 / CD324 / ECAD is expressed in non-neural epithelial tissues. CDH1 / E-CAD is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells and has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7. E-Cad promotes non-amyloidogenic degradation of Abeta precursors and has a strong inhibitory effect on APP C99 and C83 production. Defects in CDH1 / CD324 / ECAD are the cause of hereditary diffuse gastric cancer (HDGC).

## Clinical and Translational Updates

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