

# Recombinant Human S100A14 (rHuS100A14)

## PrimeGene Technical DataSheet

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<b>Catalog Number:</b>	610-01
<b>Source:</b>	<i>Escherichia coli</i>
<b>Molecular Weight:</b>	Approximately 11.66 KDa, a single non-glycosylated polypeptide chain containing 104 amino acids.
<b>Size:</b>	10µg/ 100µg/ 500µg/ 1mg
<b>AA Sequence:</b>	MGQCRSANAEDAQEFSDVERAIETLIKNFHQYSVEGGKETLTPSELRDLVTQQLPHLMPSNC GLEEKIANLGSCNSDKLEFRSFWELIGEAAKSVKLERPVRGH
<b>Purity:</b>	≥ 90% by SDS-PAGE analysis.
<b>Biological Activity:</b>	Test in Process.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in 20mM Tris, 1mM TCEP, pH8.2.
<b>Endotoxin:</b>	Less than 1 EU/µg of rHuS100A14 as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

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### ***Human S100A14***

The S100A14 protein, a member of the S100 protein family characterized by its EF-hand motif and calcium-binding ability, is encoded by this gene located in a cluster of S100 genes on chromosome. S100A14 is a homodimer that can interact with AGER. S100A14 can regulate the levels of P53/TP53 proteins and modulate cell survival and apoptosis at different concentrations through the receptor for advanced glycation end products (RAGE). S100A14 also plays a role in regulating cell migration by modulating the levels of MMP2, a matrix metalloproteinase that is transcriptionally controlled by P53/TP53.

Modulates P53/TP53 protein levels, and thereby plays a role in the regulation of cell survival and apoptosis. Depending on the context, it can promote cell proliferation or apoptosis. Plays a role in the regulation of cell migration by modulating the levels of MMP2, a matrix protease that is under transcriptional control of P53/TP53.