

**DESCRIPTION**

<b>Source</b>	Human embryonic kidney cell, HEK293-derived human SLURP2 protein			
	MD	Human IgG <sub>1</sub> (Pro100-Lys330)	IEGR	Human SLURP2 (Ile23-Asp97) Accession # P0DP57
	N-terminus		C-terminus	
<b>N-terminal Sequence</b>	Met			
<b>Analysis</b>				
<b>Structure / Form</b>	Disulfide-linked homodimer			
<b>Predicted Molecular Mass</b>	35 kDa			

**SPECIFICATIONS**

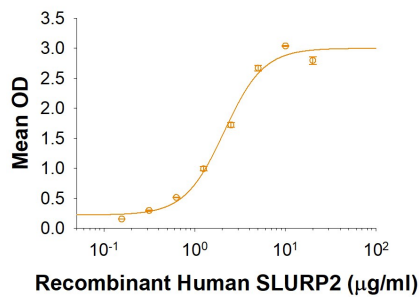
<b>SDS-PAGE</b>	36-43 kDa, reducing conditions
<b>Activity</b>	Measured by its binding ability in a functional ELISA. When Nicotinic Acetylcholine R alpha 7/CHRNA7 (Novus Catalog # <a href="#">H00001139</a> ) is immobilized at 1 µg/mL (100 µL/well), Recombinant Human SLURP2 Fc Chimera binds with an ED <sub>50</sub> of 1-6 µg/mL.
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 500 µg/mL in PBS.
<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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 °C under sterile conditions after reconstitution.</li> </ul>

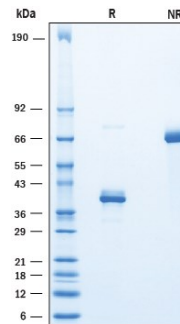
**DATA**

**Binding Activity**



When Recombinant Human Nicotinic Acetylcholine R alpha 7/CHRNA7 (Novus Catalog # [H00001139](#)) is immobilized at 1 µg/mL (100 µL/well), Recombinant Human SLURP2 Fc Chimera (Catalog # 10035-SP) binds with an ED<sub>50</sub> of 1-6 µg/mL.

**SDS-PAGE**



2 µg/lane of Recombinant Human SLURP2 Fc Chimera was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 36-43 kDa and 70-85 kDa, respectively.

**BACKGROUND**

Secreted Ly-6/uPAR domain-containing protein 2 (SLURP2) is expressed primarily in epithelial and immune cells and regulates growth and differentiation of epithelial cells (1, 2). It is part of the Ly6/neurotoxin superfamily and contains the 'three-finger' UPAR/Ly6 domain, which has a  $\beta$ -structural core and three protruding loops (2, 3). Mature SLURP2 is a secreted protein which is comprised of 75 amino acids. Human SLURP2 shares 65% and 25% aa identity with mouse and rat SLURP2, respectively. SLURP2 is demonstrated to lessen the tumorigenic activity of nitrosamines on Het-1A cells (4), reduce inflammation on human intestinal epithelial cells and Immunocytes such as CEM and U937 (5). SLURP2 can interact with  $\alpha$ 3,  $\alpha$ 4,  $\alpha$ 5,  $\alpha$ 7,  $\beta$ 2,  $\beta$ 4, and possibly  $\alpha$ 6 nicotinic acetylcholine receptors (nAChRs) as well as M1 and M3 muscarinic acetylcholine receptors (3, 6). In addition, SLURP2 controls the proliferation of keratinocytes and epithelial cancer cells via nAChRs on the cell surface (1, 6, 7). It has been suggested SLURP2 may be involved in the pathophysiology of psoriasis through its role in keratinocyte hyper-proliferation and/or T cell differentiation/activation (8).

**References:**

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2. Moriwaki, Y. *et al.* (2015) *Int. Immunopharmacol.* **29**:71.
3. Lyukmanova, E.N. *et al.* (2016) *Sci. Rep.* **6**:30698.
4. Arredondo, J. *et al.* (2007) *Life. Sci.* **80**:2243.
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6. Lyukmanova, E.N. *et al.* (2014) *Acta. Naturae.* **6**:60.
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8. Tsuji, H. *et al.* (2003) *Genomics* **81**:26.