



## Product Data Sheet

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**Product Name:** Peptide Substrate for Renin 520 Assay kit

**Catalog Number:** AS-61872-01 (0.1 mg) **Lot Number:** See label on vial

**Molecular Weight:** 2000-2200

**% Peak Area by HPLC:**  $\geq 95$

**Appearance:** Lyophilized red powder

**Peptide Reconstitution:** Using DMSO, reconstitute by adding 100  $\mu$ l to 1 mg to Renin 520 peptide. Dilute this stock solution with working buffer, such as PBS or other buffers.

**Storage:** Renin 520 peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at  $-20^{\circ}\text{C}$  or lower. Reconstituted peptide can be aliquoted and stored at  $-20^{\circ}\text{C}$  or lower.

**Description:** This FRET peptide is a specific substrate for renin. Aspartyl protease cleaves angiotensinogen to yield angiotensin I, which is further converted to angiotensin II. The renin-angiotensin system is a coordinated hormonal cascade in the control of cardiovascular, renal, and adrenal function. It governs body fluid and electrolyte balance, as well as arterial pressure. Since an overactive renin-angiotensin system leads to hypertension, renin is an attractive target for the treatment of this disease.

This renin peptide substrate may be used for screening of renin inhibitors. In the FRET peptide, the fluorescence of 5-FAM is quenched by QXL™ 520. Upon cleavage into two separate fragments by renin, the fluorescence of 5-FAM is recovered, and can be monitored at excitation/emission = 490/520 nm. This substrate is employed in the SensoLyte™ 520 Renin Assay Kit, cat # 72040.

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