



ADDRESS: Floor 29, CapitaMalls Plaza, No. 6088 Humin Rd., Minhang Dist., Shanghai 201100, China

TEL: 86-21-54795870 FAX: 86-21-54795870 Email: sales@banffgt.com

Certificate of Analysis

Product Name:	D-Valine		
Formula:	C ₅ H ₁₁ NO ₂	Molecular Weight:	117.15
CAS Number:	640-68-6		
Batch Number:	W-0140801	Quantity:	1000kg
Manufacture Date:	2014/08/01	Analysis Date:	2014/08/02
Packing:	25kg Drum	Expiration date:	2016/07/31

Items	Specifications	Results
Appearance	White or white crystalline powder	Complies
Identification(NMR)	Negative reaction	Negative reaction
Assay (HPLC)	≥99.50%	99.98%
Assay (potentiometric titration)	≥98.5%	98.86%
Specific rotation	-26.6° ~ -29.0°	-27.78°
Transmittance	≥98%	98.70%
Loss on drying	≤0.2%	0.08%
Residue on ignition	≤0.3%	0.16%
Isoleucine, Ile	≤0.1%	None
Alanine	≤0.1%	None

Conclusion: Comply with the required standards.

We state this product is for scientific use only.

Packaging and storage: Preserve in a well-closed container, protected from light.

Checked by: Xiaojuan Yu

Approved by: Jurong Liu

