

## Product datasheet for PH311966

### ARNT2 (NM\_014862) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	ARNT2 MS Standard C13 and N15-labeled recombinant protein (NP_055677)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC211966
Predicted MW:	78.5 kDa
Protein Sequence:	>RC211966 representing NM_014862 Red=Cloning site Green=Tags(s)

MATPAAVNPPEMASDIPGSVTLPVAPMAATGQVRMAGAMPARGGKRRSGMDFDDEDGEGPSKFSRENHSE  
IERRRRNKMTQYITELSDMVPTCSALARKPKLTLIRMAVSHMKS MRGTGNKSTDGAYKPSFLTEQELKH  
LILEAADGFLFVVAETGRVIYVSDSVTPVLNQPQSEWFGSTLYEQVHPDDVEKLREQLCTSENSMTGRI  
LDLKTGTVKKEGQSSMRMCMGSRRSFICRMRCGNAPLDHLPLNRITTMKRFRNGLGPVKEGEAQYAVV  
HCTGYIKAWPPAGMTIPEEDADVGQGSKYCLVAIGRLQVTSSPVCMDMNGMSVPTEFLSRHNSDGIITFV  
DPRCISVIGYQPQDLLGKDILEFCHPEDQSHLRESFQQVVKLKGQVLSVMYRFRTKNREWMLIRTSSFTF  
QNPYSDEIEYIICTNTNVKQLQQQAELEVHQRDGLSSYDL SQVPVNL PAGVHEAGKSVEKADAI FSQE  
RDP RFAEMFAGISASEKKMMSSASAAGTQQIYSQGSPPFGSHGKAFSSSVVHVPGVNDIQSSSSTGQNM  
SQISRQLNQSQVAWTGSRPPFGQQIPSSQSKTQSSPFGIGTSHTYPADPSSYSPSSPATSSPSGNAYS  
SLANRTPGFAESGSSGQFQGRPSEVWSQWQSQHGGQSSGEQSHHQPGQTEVFQDMLPMPGDPTQGTGN  
YNIEDFADLGMFPFSE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_055677</a></u>



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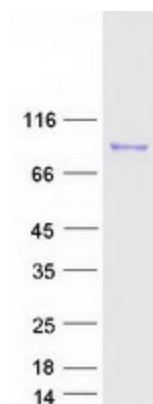
RefSeq Size:	6576
RefSeq ORF:	2151
Synonyms:	bHLHe1; WEDAS
Locus ID:	9915
UniProt ID:	<a href="#">Q9HBMZ</a> , <a href="#">Q7Z3A3</a> , <a href="#">X5DQN9</a> , <a href="#">Q86TN1</a>
Cytogenetics:	15q25.1

**Summary:** This gene encodes a member of the basic-helix-loop-helix-Per-Arnt-Sim (bHLH-PAS) superfamily of transcription factors. The encoded protein acts as a partner for several sensor proteins of the bHLH-PAS family, forming heterodimers with the sensor proteins that bind regulatory DNA sequences in genes responsive to developmental and environmental stimuli. Under hypoxic conditions, the encoded protein complexes with hypoxia-inducible factor 1alpha in the nucleus and this complex binds to hypoxia-responsive elements in enhancers and promoters of oxygen-responsive genes. A highly similar protein in mouse forms functional complexes with both aryl hydrocarbon receptors and Single-minded proteins, suggesting additional roles for the encoded protein in the metabolism of xenobiotic compounds and the regulation of neurogenesis, respectively. [provided by RefSeq, Dec 2013]

**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Pathways in cancer, Renal cell carcinoma

### Product images:



Coomassie blue staining of purified ARNT2 protein (Cat# [TP311966]). The protein was produced from HEK293T cells transfected with ARNT2 cDNA clone (Cat# [RC211966]) using MegaTran 2.0 (Cat# [TT210002]).